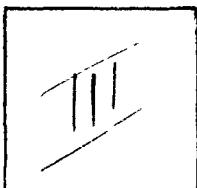


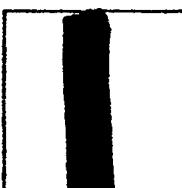
PHOTOGRAPH THIS SHEET

AD-A113 666

DTIC ACCESSION NUMBER



LEVEL



INVENTORY

Final Rept., Mar. 80 - Sept. 81

Nov. 81

Contract F08635-80-C-0086 ESL-TR-81-53, Vol. II, Part II

DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited

DISTRIBUTION STATEMENT

ACCESSION FOR

NTIS GRA&I



DTIC TAB

UNANNOUNCED

JUSTIFICATION

BY

DISTRIBUTION /

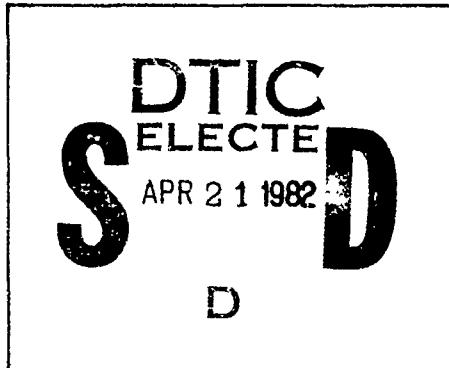
AVAILABILITY CODES

DIST

AVAIL AND/OR SPECIAL

A

DISTRIBUTION STAMP



DATE ACCESSED

DATE RECEIVED IN DTIC

PHOTOGRAPH THIS SHEET AND RETURN TO DTIC-DDA-2

ATMOSPHERIC CHEMISTRY OF HYDROCARBON
FUELS

VOLUME II: OUTDOOR CHAMBER DATA
TABULATIONS (PART II)

WILLIAM P. L. CARTER, PAUL S. RIPLEY,
CECIL G. SMITH, AND JAMES N. PITTS, JR.

STATEWIDE AIR POLLUTION RESEARCH CENTER
UNIVERSITY OF CALIFORNIA
RIVERSIDE, CALIFORNIA 92521

NOVEMBER 1981

FINAL REPORT
MARCH 1980 - SEPTEMBER 1981

APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED



ENGINEERING & SERVICES LABORATORY
AIR FORCE ENGINEERING & SERVICES CENTER
TYNDALL AIR FORCE BASE, FLORIDA 32403

AD-A113 666

NOTICE

PLEASE DO NOT REQUEST COPIES OF THIS REPORT FROM
HQ AFESC/RD (ENGINEERING AND SERVICES LABORATORY),
ADDITIONAL COPIES MAY BE PURCHASED FROM:

NATIONAL TECHNICAL INFORMATION SERVICE
5285 PORT ROYAL ROAD
SPRINGFIELD, VIRGINIA 22161

FEDERAL GOVERNMENT AGENCIES AND THEIR CONTRACTORS
REGISTERED WITH DEFENSE TECHNICAL INFORMATION CENTER
SHOULD DIRECT REQUESTS FOR COPIES OF THIS REPORT TO:

DEFENSE TECHNICAL INFORMATION CENTER
CAMERON STATION
ALEXANDRIA, VIRGINIA 22314

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

these fuels to adversely affect air quality.

This is Volume II of the report. Due to printing limitations, Volume II consists of two separately bound parts which contain the detailed data sheets for the outdoor chamber experiments. This is Part II of Volume II.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

PREFACE

This report was prepared by the Statewide Air Pollution Research Center (SAPRC) of the University of California, Riverside, California 92521, under program element 1900, project 20, subtask 20, with the Air Force Engineering and Services Center, Tyndall Air Force Base, Florida 32403.

This report is presented in two volumes. Volume I contains a description of the experiments conducted under this program and a discussion of the results obtained. Volume II contains the detailed data sheets for the outdoor chamber runs in two separate parts. This is Volume II, Part II.

The work was performed during the period March 1980 through September 1981 under the direction of Dr. James N. Pitts, Jr., Director of SAPRC and Principal Investigator, and Dr. William P. L. Carter, Project Manager.

The principal research staff on this program were Mr. Paul S. Ripley and Ms. Cecil G. Smith. Drs. Roger Atkinson and Arthur M. Winer (Assistant Director of SAPRC) participated in the supervision of this program, in technical discussions, and in the preparation of this report.

Assistance in conducting this program was provided by Mr. Dennis R. Fitz, Ms. Sara M. Aschmann, Mr. Frank R. Burleson, Ms. Margaret C. Dodd, Mr. Robert E. Burkey, Jr., Ms. JoMarie Faulkerson, and Mr. Glen C. Voga-laar. The gas chromatographic-mass spectrographic analyses were conducted by Mr. Thomas S. Fisher, and assistance in processing the data was provided by Mr. Jeffrey Everett, Mr. Joseph P. Lick, and Ms. Laurie A. Willis.

Appreciation is expressed to Ms. Christy J. Ranck, Ms. I. M. Minnich, Dr. Marian C. Carpelan, and Ms. Minn P. Poe for assistance in the preparation of this report.

The support and contribution to the conduct of this program by Dr. Daniel A. Stone, Project Officer, Maj. Ron Channell, and LtCol. Michael MacNaughton, Chief of the Environmental Sciences Division at the inception of this program are gratefully acknowledged.

This report has been reviewed by the Public Affairs Office (PA) and is releasable to the National Technical Information Service (NTIS). At NTIS it will be available to the general public, including foreign nationals.

This technical report has been reviewed and is approved for publication.

Daniel A. Stone
DANIEL A. STONE, GS-13
Project Officer

Ronald E. Channell
RONALD E. CHANNELL, Maj, USAF
Chief, Environmental Chemistry
Branch

Michael J. Ryan
MICHAEL J. RYAN, LtCol, USAF, BSC
Chief, Environics Division

Francis B. Crowley III
FRANCIS B. CROWLEY III, Col USAF
Dir, Engineering & Services
Laboratory

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page*</u>
I	INTRODUCTION.....	1
II	OUTDOOR CHAMBER DATA LISTINGS (concluded)	330

*Page numbers remain the same for the INTRODUCTION in Part II as they were in Part I, since they are merely repeated for clarity. Page numbers for the OUTDOOR CHAMBER DATA LISTINGS are sequential through Part I and Part II of Volume II.

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
1	Representative Abbreviations Used in the Data Tabulations...	3

SECTION I

INTRODUCTION

In order to investigate the atmospheric impact of releases of hydrocarbon fuels used in military aircraft operations, and to obtain a data base from which the atmospheric reactivities of different types of military and commercial fuels can be compared, a series of outdoor environmental chamber irradiations, employing natural sunlight, were performed under contract for the United States Air Force. The military fuels studied included both petroleum- and shale-derived JP-4 and JP-8, the experimental high-energy cruise missile fuels JP-10, RJ-4, and RJ-5, and, for comparison purposes, the commercial fuels diesel No. 2 and unleaded gasoline. In this volume, the detailed data tabulations for these outdoor chamber irradiations employing these fuels, and the associated array of control and chamber characterization experiments, are given.

The data tabulations, given in section II of this volume, include the following information for each run (where applicable):

- The Air Force Fuels (AFF) run number, ranging from AFF-2 through AFF-132, excluding AFF-96. (Data for runs AFF-1 and AFF 96 are not included because these were aborted before usable data were obtained).
- A brief run description.
- The date the run was performed (below run description).
- The date the tabulation was printed (right hand corner on each page).
- Comments for the run. These include: major operations or observations taken from the laboratory log book; problems encountered during the run (where applicable); major calculated results (for characterization runs such as O_3 decays, pure air photolyses, NO_x -air irradiations, etc.) and (for multi-day runs) daily averages of temperature and UV intensity.
- Summaries of overall averages of all measurements of temperature, UV intensity, and (in some cases) dew point.

- Initial concentrations of NO, NO₂, total hydrocarbon, and (for n-butane runs) n-butane.
- Lists of all instruments used in these runs (including in some cases instruments whose data are not reported on the sheets (see below). For each instrument, this list indicates the ID number (used internally at SAPRC), the label identifying the instrument on the data tabulation, and a brief description giving information identifying the instrument and/or technique.
- The data tabulations. The tabulations indicate the compound or parameter measured, the units in which the measurements are reported, the instrument, and (for dual chamber runs) the chamber side number. Because of space and format limitations, the compound and parameter names and the units of the measurements frequently had to be abbreviated on the tabulations. The meanings of representative abbreviations which may not be obvious are listed on Table 1. For each data point, the day ("DY"), the clock time (always Pacific Standard Time), and the elapsed time (in minutes) since the chamber was uncovered (or since the first measurement for dark runs) are indicated.
- If any of the data are flagged (indicated by an "A", or "B", etc., immediately to the right of the value), footnotes giving the reason it is flagged appear at the end of the tabulation for the run.

A number of measurements were made which are not reported on the tabulations in order to reduce their bulk. These include primarily gas chromatographic measurements of low levels of trace species present in the pure air used for the fuel runs, methane (which is always present at its approximate atmospheric background levels, and is inert), and unidentified or minor fuel components. These data are kept on file at the Statewide Air Pollution Research Center (University of California, Riverside, CA 92521-0312) and are available upon request. In addition, the entire data set is available in computer-readable format, and information concerning this is available from Dr. William P. L. Carter at the above address.

TABLE 1. REPRESENTATIVE ABBREVIATIONS USED IN THE DATA TABULATIONS.

<u>Abbreviation</u>	<u>Chemical Species</u>
NO2-UNC	NO ₂ readings, uncorrected for interferences by peroxyacetyl nitrates and other organic nitrates.
1-C4=	1-Butene
I-C4=	Isobutene
I-C5	2-Methyl butane (isopentane)
N-C5	n-Pentane
CYCL-C5	Cyclopentane
C5-ISOMS	Unidentified pentane isomers
O-XYL	ortho-Xylene
M+P-XYL	meta + para Xylenes (not separated)
C2BENZ	Ethylbenzene
I-C3-BZ	Isopropylbenzene
124TMEBZ	1,2,4-Trimethylbenzene
ACETALD	Acetyldehyde
MEK	Methyl ethyl ketone
PAN	Peroxyacetyl nitrate
C4-N-2	2-Butyl nitrate
THC	Total hydrocarbons
NMHC	Non-methane hydrocarbons

<u>Abbreviation</u>	<u>Aerosol Parameters</u>
CONDENS	Condensation nuclei
#PART>.5	Number of particles > 0.5 microns diameter
AER.V	Aerosol volume
AER.N	Aerosol number (total number of particles)
AER.S	Aerosol surface area
PART.075	Number of particles in the size range centered at 0.075 microns diameter

TABLE 1. REPRESENTATIVE ABBREVIATIONS USED IN THE DATA TABULATIONS
(concluded).

<u>Abbreviation</u>	<u>Units of Measurement</u>	<u>Meaning</u>
MW/CM2	Milliwatt cm ⁻²	
PART/CC	Particle cm ⁻²	
10E3/CC	(Particle cm ⁻³) x 10 ⁻³	
10-4 M-1	(Meter ⁻¹) x 10 ⁴	
UM3/CC	Micrometer ³ cm ⁻³ or parts-per-trillion by volume	
UM2/CC	Micrometer ² cm ⁻³	
RAW DATA	Arbitrary units; no calibration factor is available	

Pages 5 through 329 are contained in VolII, part I.

AFF- 71

JP-8(PET) VARIABLE FUEL
1981, APR 9-10

DAY 1 (APRIL 9)

0515: STARTED FILL. WET: 6.8 PSIG; DRY: 0 PSIG; DEW PT: 7.8 C RH: 53%
0637: INJECTED 3.8 ML NO₂
0639: INJECTED 12.6 ML NO
0644: INJECTED 1000 MICROLITERS JP-8(PET), 2 MINUTES OF N₂ ONLY, THEN
HEAT FOR 30 MINUTES AT 250 C (INTO SIDE A)
0724: DIVIDE BAG
0741: INJECTED 500 MICROLITERS JP-8(PET) INTO SIDE B. SAME AS FIRST INJECTION
0900: BAG UNCOVERED (T=0)
1620: BAG COVERED FOR THE NIGHT

DAY 2 (APRIL 10)

0800: VERY CLOUDY, WITH HEAVY MIST
0900: BAG UNCOVERED FOR DAY 2
0910: WEATHER STILL VERY CLOUDY, BUT CLEARING
1000: FEWER CLOUDS NOW, SOME SUN
1520: RUN OVER; BAG DUMPED

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	26(+/-2)	22(+/-2)
AVG.UV(MW/CM ²)	2.3(+/-0.9)	2.0(+/-0.5)

T=0 AT 900 PST

BAG NO. 21 USED

330

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	22.2	5.6	DEG C	SIDE 1
T	DORIC-1	21.9	4.9	DEG C	SIDE 2
UV RAD	EPPELEY-2	2.15	0.70	MW/CM ²	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.249	PPM	SIDE 1
NO	B-NOX-1	0.250	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.107	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.111	PPM	SIDE 2
THC	BK6800-1	53.00	PPMC	SIDE 1
THC	BK6800-1	30.20	PPMC	SIDE 2

AFF- 71
JP-8(PET) VARIABLE FUEL
1981, APR 9-10

INSTRUMENTS USED			SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION	
2100	PN-1	RM-121 POROPAK-N GC; FID	
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID	
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID	
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID	
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030	
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148	
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143	
1790	D-1790	DASIBI 1790 OZONE MONITOR	
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2	
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479	
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D	
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER	
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS	
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG	
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD	

331

AFF- 71
 JP-8(PET) VARIABLE FUEL
 1981, APR 9-10

CLOCK BY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM B-1790	SIDE 2 OZONE PPM B-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NUX-1	SIDE 2 NO2-UNC PPM B-NUX-1	SIDE 1 NGX-UNC PPM B-NOX-1	SIDE 2 NGX-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SI T F BN6
1 615	-165	0.000	0.000	0.007	0.007	0.005	0.005	0.010	0.010	1.04	1	
1 835	-25	0.041	0.041	0.249	0.249	0.107	0.107	0.361	0.361	53.00	--	
1 845	-15	-----	0.000	-----	0.250	-----	0.111	-----	0.369	-----	30	
1 1005	65	0.065	-----	0.167	-----	0.167	-----	0.342	-----	53.80	--	
1 1015	75	-----	0.009	-----	0.189	-----	0.153	-----	0.352	-----	29	
1 1105	125	0.066	-----	0.069	-----	0.211	-----	0.287	-----	50.70	--	
1 1115	135	-----	0.018	-----	0.114	-----	0.207	-----	0.331	-----	29	
1 1205	185	0.167	-----	0.020	-----	0.240	-----	0.258	-----	50.10	--	
1 1215	195	-----	0.046	-----	0.049	-----	0.258	-----	0.309	-----	28	
1 1305	245	0.309	-----	0.011	-----	0.189	-----	0.196	-----	49.60	--	
1 1315	255	-----	0.131	-----	0.019	-----	0.257	-----	0.271	-----	27	
1 1405	305	0.421	-----	0.009	-----	0.127	-----	0.132	-----	48.50	--	
1 1415	315	-----	0.222	-----	0.011	-----	0.223	-----	0.231	-----	27	
1 1505	365	0.446	-----	0.009	-----	0.088	-----	0.092	-----	47.90	--	
1 1515	375	-----	0.305	-----	0.010	-----	0.180	-----	0.189	-----	26	
1 1605	425	0.435	-----	0.010	-----	0.078	-----	0.081	-----	47.20	--	
1 1615	435	-----	0.338	-----	0.010	-----	0.142	-----	0.149	-----	26	
2 835	1415	0.310	-----	0.008	-----	0.042	-----	0.048	-----	43.10	--	
2 845	1425	-----	0.193	-----	0.009	-----	0.042	-----	0.048	-----	25	
2 1005	1505	0.285	-----	0.009	-----	0.047	-----	0.050	-----	-----	--	
2 1015	1515	-----	0.192	-----	0.009	-----	0.048	-----	0.051	-----	--	
2 1105	1565	0.286	-----	0.008	-----	0.050	-----	0.052	-----	44.70	--	
2 1115	1575	-----	0.182	-----	0.010	-----	0.051	-----	0.054	-----	25	
2 1205	1625	0.283	-----	0.009	-----	0.053	-----	0.059	-----	45.00	--	
2 1215	1635	-----	0.188	-----	0.009	-----	0.054	-----	0.059	-----	25	
2 1305	1685	0.273	-----	0.009	-----	0.057	-----	0.060	-----	45.50	--	
2 1315	1695	-----	0.195	-----	0.009	-----	0.054	-----	0.059	-----	25	
2 1405	1745	0.277	-----	0.009	-----	0.058	-----	0.061	-----	45.00	--	
2 1415	1755	-----	0.200	-----	0.009	-----	0.059	-----	0.061	-----	25	
2 1505	1805	0.264	-----	0.009	-----	0.059	-----	0.062	-----	45.40	--	
2 1515	1815	-----	0.203	-----	0.009	-----	0.059	-----	0.060	-----	25	

----- NO DATA TAKEN

AFF- 71
 JP-8(FET) VARIABLE FUEL
 1981, APR 9-10

	CLOCK BY HR.	ELAPSED TIME (MIN)	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM ² EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SI CON 10E CNC
1	615	-165	0.18	0.18	10.5	10.5	-----	0.0	--
1	835	-25	43.80	-----	16.8	-----	-----	59.0	--
1	845	-15	-----	23.70	-----	18.2	-----	-----	1
1	1005	65	41.80	-----	21.3	-----	2.01	36.0	--
1	1015	75	-----	23.80	-----	22.3	2.16	-----	2
1	1105	125	43.00	-----	25.0	-----	3.32	25.5	--
1	1115	135	-----	23.70	-----	24.8	3.36	-----	2
1	1205	185	43.10	-----	26.6	-----	3.06	20.0	--
1	1215	195	-----	24.00	-----	26.9	3.24	-----	1
1	1305	245	42.70	-----	29.2	-----	2.87	15.2	--
1	1315	255	-----	22.30	-----	27.3	2.38	-----	1
1	1405	305	40.80	-----	29.4	-----	2.35	11.2	--
1	1415	315	-----	22.40	-----	27.5	2.24	-----	--
1	1505	365	40.00	-----	28.2	-----	1.57	8.4	--
1	1515	375	-----	21.90	-----	26.6	1.41	-----	--
1	1605	425	40.50	-----	25.5	-----	0.89	6.0	--
1	1615	435	-----	21.70	-----	24.2	0.78	-----	--
2	835	1415	38.30	-----	13.2	-----	-----	0.0	--
2	845	1425	-----	20.60	-----	13.4	-----	-----	--
2	1005	1505	38.50	-----	17.8	-----	1.60	0.0	--
2	1015	1515	-----	20.00	-----	17.3	1.41	-----	--
2	1105	1565	38.90	-----	18.6	-----	1.79	0.9	--
2	1115	1575	-----	21.20	-----	21.4	2.46	-----	--
2	1205	1625	37.70	-----	21.8	-----	2.05	0.5	--
2	1215	1635	-----	20.30	-----	21.6	2.09	-----	--
2	1305	1685	39.00	-----	22.3	-----	2.43	0.2	--
2	1315	1695	-----	20.30	-----	23.5	2.57	-----	--
2	1405	1745	37.30	-----	24.3	-----	2.57	0.1	--
2	1415	1755	-----	18.80	-----	23.6	2.24	-----	--
2	1505	1805	37.40	-----	24.0	-----	1.75	0.0	--
2	1515	1815	-----	18.50	-----	21.8	1.38	-----	--

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

UV RAD MW/CM2 EFFLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
-----	0.0	0.0	0.	0.	0.	0.
-----	59.0	-----	8.	-----	1.	-----
-----	-----	10.0	-----	0.	-----	0.
2.01	36.0	-----	7.	-----	1.	-----
2.16	-----	27.0	-----	0.	-----	0.
3.32	25.5	-----	53.	-----	4.	-----
3.36	-----	21.2	-----	0.	-----	0.
3.06	20.0	-----	176.	-----	8.	-----
3.24	-----	15.0	-----	7.	-----	0.
2.87	15.2	-----	397.	-----	143.	-----
2.38	-----	11.0	-----	113.	-----	2.
2.35	11.2	-----	450.	-----	287.	-----
2.24	-----	7.9	-----	300.	-----	52.
1.57	8.4	-----	457.	-----	332.	-----
1.41	-----	5.7	-----	390.	-----	160.
0.89	6.0	-----	455.	-----	330.	-----
0.78	-----	4.0	-----	421.	-----	236.
-----	0.0	-----	298.	-----	74.	-----
-----	-----	0.0	-----	323.	-----	87.
1.60	0.0	-----	260.	-----	77.	-----
1.41	-----	0.0	-----	303.	-----	90.
1.79	0.9	-----	230.	-----	113.	-----
2.46	-----	0.1	-----	276.	-----	107.
2.05	0.5	-----	197.	-----	132.	-----
2.09	-----	0.2	-----	242.	-----	150.
2.43	0.2	-----	205.	-----	123.	-----
2.57	-----	0.1	-----	221.	-----	158.
2.57	0.1	-----	252.	-----	114.	-----
2.24	-----	0.1	-----	242.	-----	179.
1.75	0.0	-----	280.	-----	114.	-----
1.38	-----	0.0	-----	257.	-----	141.

2

AFF- 71
 JP-8(PET) VARIABLE FUEL
 1981, APR 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER. UM2. TSI-023
1 615	-165	0.	0.	1.	1.	50.	50,	
1 730	-90	----	----	----	----	----	----	
1 830	-30	----	----	----	----	----	----	
1 835	-25	0.	----	64.	----	1.2E 05	----	241
1 845	-15	----	0.	----	4.	----	1.6E 04	----
1 1005	65	0.	----	58.	----	6.3E 04	----	219
1 1015	75	----	0.	----	16.	----	4.1E 04	----
1 1105	125	0.	----	83.	----	5.4E 04	----	259
1 1115	135	----	0.	----	34.	----	4.1E 04	----
1 1205	185	0.	----	138.	----	3.6E 04	----	344
1 1215	195	----	0.	----	52.	----	3.2E 04	----
1 1305	245	2.	----	189.	----	3.0E 04	----	386
1 1315	255	----	0.	----	77.	----	2.4E 04	----
1 1405	305	42.	----	219.	----	2.2E 04	----	382
1 1415	315	----	0.	----	99.	----	1.9E 04	----
1 1505	365	81.	----	207.	----	1.6E 04	----	336
1 1515	375	----	5.	----	116.	----	1.6E 04	----
1 1605	425	84.	----	175.	----	1.1E 04	----	275
1 1615	435	----	22.	----	119.	----	9916.	----
2 805	1385	----	----	----	----	----	----	
2 835	1415	1.	----	9.	----	472.	----	115
2 845	1425	----	2.	----	13.	----	778.	----
2 1005	1505	2.	----	8.	----	1204.	----	106
2 1015	1515	----	3.	----	10.	----	1306.	----
2 1105	1565	3.	----	10.	----	3127.	----	217
2 1115	1575	----	3.	----	9.	----	1387.	----
2 1205	1625	4.	----	18.	----	3146.	----	328
2 1215	1635	----	5.	----	10.	----	1078.	----
2 1305	1685	4.	----	19.	----	2185.	----	323
2 1315	1695	----	7.	----	10.	----	1391.	----
2 1405	1745	5.	----	14.	----	1470.	----	240
2 1415	1755	----	8.	----	11.	----	1279.	----
2 1505	1805	5.	----	14.	----	603.	----	198
2 1515	1815	----	8.	----	11.	----	921.	----

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1
50.	50.	4.	4.	-----	-----
-----	-----	-----	-----	-----	0.0010
-----	-----	-----	-----	0.0015	-----
1.2E 05	-----	2415.	-----	-----	-----
-----	1.6E 04	-----	184.	-----	-----
6.3E 04	-----	2192.	-----	-----	-----
-----	4.1E 04	-----	759.	-----	-----
5.4E 04	-----	2597.	-----	-----	-----
-----	4.1E 04	-----	1171.	-----	-----
3.6E 04	-----	3442.	-----	-----	-----
-----	3.2E 04	-----	1582.	-----	-----
3.0E 04	-----	3864.	-----	-----	-----
-----	2.4E 04	-----	1965.	-----	-----
2.2E 04	-----	3827.	-----	-----	-----
-----	1.9E 04	-----	2123.	-----	-----
1.6E 04	-----	3360.	-----	-----	-----
-----	1.6E 04	-----	2170.	-----	0.0008
1.1E 04	-----	2759.	-----	0.0016	-----
-----	9916.	-----	2006.	-----	-----
-----	-----	-----	-----	-----	0.0009
472.	-----	115.	-----	0.0017	-----
-----	778.	-----	160.	-----	-----
1204.	-----	106.	-----	-----	-----
-----	1306.	-----	117.	-----	-----
3127.	-----	217.	-----	-----	-----
-----	1387.	-----	138.	-----	-----
3146.	-----	328.	-----	-----	-----
-----	1078.	-----	164.	-----	-----
2185.	-----	323.	-----	-----	-----
-----	1391.	-----	172.	-----	-----
1470.	-----	240.	-----	-----	-----
-----	1279.	-----	170.	-----	0.0011
603.	-----	198.	-----	0.0017	-----
-----	921.	-----	154.	-----	-----

AFF- 71
JP-8(PET) VARIABLE FUEL
1981, APR 9-10

CLOCK TIME DY	ELAPSED TIME HR.	SIDE 1 N-C10 VAR 3700	SIDE 2 N-C10 VAR 3700	SIDE 1 N-C11 VAR 3700	SIDE 2 N-C11 VAR 3700	SIDE 1 N-C12 VAR 3700	SIDE 2 N-C12 VAR 3700	SIDE 1 N-C VAR 3700
		(MIN)	PPM	PPM	PPM	PPM	PPM	PPM
1 830	-30	0.0560	-----	0.1988	-----	0.2123	-----	0.1
1 1015	75	-----	0.0271	-----	0.0987	-----	0.1205	---
1 1105	125	0.0531	-----	0.1930	-----	0.2131	-----	0.1
1 1215	195	-----	0.0256	-----	0.0964	-----	0.1132	---
1 1405	305	0.0529	-----	0.1882	-----	0.2143	-----	0.1
1 1515	375	-----	0.0253	-----	0.0915	-----	0.1110	---
1 1605	425	0.0537	-----	0.1926	-----	0.2156	-----	0.1
2 805	1385	-----	0.0250	-----	0.0881	-----	0.1104	---
2 835	1415	0.0523	-----	0.1816	-----	0.1950	-----	0.1
2 1015	1515	-----	0.0251	-----	0.0898	-----	0.1108	---
2 1205	1625	0.0507	-----	0.1794	-----	0.1889	-----	0.1
2 1315	1695	-----	0.0241	-----	0.0895	-----	0.0992	---
2 1405	1745	0.0510	-----	0.1760	-----	0.1845	-----	0.1

----- NO DATA TAKEN

532

12 NOV 1981
PAGE 6

DE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
C12	N-C12	N-C13	N-C13	N-C14	N-C14
PM	PPM	PPM	PPM	PPM	PPM
3700	VAR 3700	VAR 3700	VAR 3700	VAR 3700	VAR 3700
2123	-----	0.1669	-----	0.078	-----
-----	0.1205	-----	0.1046	-----	0.063
2131	-----	0.1587	-----	0.085	-----
-----	0.1132	-----	0.0932	-----	0.052
2143	-----	0.1783	-----	0.104	-----
-----	0.1110	-----	0.0962	-----	0.058
2156	-----	0.1684	-----	0.089	-----
-----	0.1104	-----	0.0854	-----	0.057
1950	-----	0.1578	-----	0.066	-----
-----	0.1108	-----	0.0841	-----	0.045
1889	-----	0.1456	-----	0.077	-----
-----	0.0992	-----	0.0788	-----	0.042
1845	-----	0.1337	-----	0.063	-----

AFF- 71
 JP-8(PET) VARIABLE FUEL
 1981, APR 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 1	SIDE 2	SIDE 2	SIDE 2
		124TMEBZ	124TMEBZ	CO PPM BYRON	CO PPM BK6800-1	CO PPM BYRON	CO PPM BK6800-1	PA PP ECD
		VAR 3700	VAR 3700					
1 615	-165	0.0031	0.0031	0.30	0.94	0.30	0.94	0.
1 825	-35	-----	-----	-----	-----	-----	-----	---
1 830	-30	0.0184	-----	-----	-----	-----	-----	---
1 835	-25	-----	-----	0.35	0.99	-----	-----	0.
1 845	-15	-----	-----	-----	-----	0.36	0.95	---
1 1005	65	-----	-----	0.26	1.03	-----	-----	0.
1 1015	75	-----	0.0092	-----	-----	0.24	1.02	---
1 1105	125	0.0167	-----	0.23	1.02	-----	-----	---
1 1115	135	-----	-----	-----	-----	0.36	1.02	---
1 1200	180	-----	-----	-----	-----	-----	-----	---
1 1205	185	-----	-----	0.27	1.06	-----	-----	0.
1 1215	195	-----	0.0081	-----	-----	0.38	1.01	---
1 1305	245	-----	-----	0.48	1.10	-----	-----	0.
1 1315	255	-----	-----	-----	-----	0.49	1.08	---
1 1405	305	0.0159	-----	0.49	1.15	-----	-----	0.
1 1415	315	-----	-----	-----	-----	0.42	1.08	---
1 1505	365	-----	-----	0.50	1.18	-----	-----	0.
1 1515	375	-----	0.0075	-----	-----	0.39	1.12	---
1 1605	425	0.0145	-----	0.42	1.19	-----	-----	0.
1 1610	430	-----	-----	-----	-----	-----	-----	---
1 1615	435	-----	-----	-----	-----	0.42	1.10	---
2 805	1385	-----	0.0089	-----	-----	-----	-----	---
2 830	1410	-----	-----	-----	-----	-----	-----	---
2 835	1415	0.0162	-----	0.41	1.15	-----	-----	0.
2 845	1425	-----	-----	-----	-----	0.50	1.16	---
2 1005	1505	-----	-----	0.49	-----	-----	-----	0.
2 1015	1515	-----	0.0082	-----	-----	0.50	-----	---
2 1105	1565	-----	-----	1.12	1.21	-----	-----	0.
2 1115	1575	-----	-----	-----	-----	0.55	1.16	---
2 1200	1620	-----	-----	-----	-----	-----	-----	---
2 1205	1625	0.0151	-----	0.56	1.24	-----	-----	0.
2 1215	1635	-----	-----	-----	-----	0.31	1.19	---
2 1305	1685	-----	-----	0.48	1.17	-----	-----	0.
2 1315	1695	-----	0.0070	-----	-----	0.74	1.22	---
2 1405	1745	0.0146	-----	0.57	1.26	-----	-----	0.
2 1415	1755	-----	-----	-----	-----	0.71	1.24	---
2 1500	1800	-----	-----	-----	-----	-----	-----	---
2 1505	1805	-----	-----	2.31	1.30	-----	-----	0.
2 1510	1810	-----	-----	-----	-----	-----	-----	---
2 1515	1815	-----	-----	-----	-----	0.58	1.30	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

	SIDE 2 CO PPM BYRON	SIDE 2 CJ PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
1	0.36	0.94	0.000	0.000	-----	-----
2	-----	-----	-----	-----	0.023	0.012
3	-----	-----	-----	-----	-----	-----
4	-----	-----	0.000	-----	-----	-----
5	0.36	0.95	-----	0.000	-----	-----
6	-----	-----	0.001	-----	-----	-----
7	0.24	1.02	-----	0.001	-----	-----
8	-----	-----	-----	-----	-----	-----
9	0.36	1.02	-----	0.003	-----	-----
0	-----	-----	-----	-----	0.066	0.016
1	-----	-----	0.015	-----	-----	-----
2	0.38	1.01	-----	0.008	-----	-----
3	-----	-----	0.029	-----	-----	-----
4	0.49	1.08	-----	0.018	-----	-----
5	-----	-----	0.042	-----	-----	-----
6	0.42	1.08	-----	0.025	-----	-----
7	-----	-----	0.055	-----	-----	-----
8	0.39	1.12	-----	0.034	-----	-----
9	-----	-----	0.068	-----	-----	-----
0	-----	-----	-----	-----	0.054	0.038
1	0.42	1.10	-----	0.045	-----	-----
2	-----	-----	-----	-----	-----	-----
3	-----	-----	-----	-----	0.101	0.068
4	-----	-----	0.032	-----	-----	-----
5	0.50	1.16	-----	0.029	-----	-----
6	-----	-----	0.032	-----	-----	-----
7	0.50	-----	-----	0.034	-----	-----
8	-----	-----	0.037	-----	-----	-----
9	0.55	1.16	-----	0.036	-----	-----
0	-----	-----	-----	-----	0.082	0.058
1	-----	-----	0.038	-----	-----	-----
2	0.31	1.19	-----	0.039	-----	-----
3	-----	-----	0.041	-----	-----	-----
4	0.74	1.22	-----	0.041	-----	-----
5	-----	-----	0.040	-----	-----	-----
6	0.71	1.24	-----	0.039	-----	-----
7	-----	-----	-----	-----	-----	0.053
8	-----	-----	0.042	-----	-----	-----
9	-----	-----	-----	-----	0.084	-----
0	0.58	1.30	-----	0.042	-----	-----

2

AFF- 71
 JP-8(PET) VARIABLE FUEL
 1981, APR 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE	
		PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.1 PART/C TSI-02					
1 615	-165	0.	0.	0.	0.	89.	89.	-48.							
1 835	-25	3.1E 04	-----	2.6E 04	-----	4.7E 04	-----	1.1E							
1 845	-15	-----	1336.	-----	1.1E 04	-----	2620.	-----							
1 1005	65	501.	-----	7656.	-----	3.4E 04	-----	1.9E							
1 1015	75	-----	167.	-----	2.1E 04	-----	1.4E 04	-----							
1 1105	125	9185.	-----	-2175.	-----	1.9E 04	-----	2.4E							
1 1115	135	-----	5678.	-----	9831.	-----	1.5E 04	-----							
1 1205	185	-4008.	-----	2784.	-----	4174.	-----	2.5E							
1 1215	195	-----	334.	-----	2871.	-----	1.2E 04	-----							
1 1305	245	2171.	-----	1044.	-----	355.	-----	1.4E							
1 1315	255	-----	668.	-----	696.	-----	2797.	-----							
1 1405	305	1169.	-----	-87.	-----	755.	-----	7399.							
1 1415	315	-----	0.	-----	1740.	-----	89.	-----							
1 1505	365	167.	-----	1044.	-----	-444.	-----	4218.							
1 1515	375	-----	2171.	-----	609.	-----	-44.	-----							
1 1605	425	0.	-----	0.	-----	266.	-----	2362.							
1 1615	435	-----	-501.	-----	783.	-----	311.	-----							
2 835	1415	167.	-----	87.	-----	-44.	-----	0.							
2 845	1425	-----	334.	-----	87.	-----	0.	-----							
2 1005	1505	668.	-----	87.	-----	178.	-----	48.							
2 1015	1515	-----	835.	-----	174.	-----	44.	-----							
2 1105	1565	0.	-----	261.	-----	1066.	-----	1446.							
2 1115	1575	-----	334.	-----	87.	-----	355.	-----							
2 1205	1625	501.	-----	261.	-----	89.	-----	1374.							
2 1215	1635	-----	0.	-----	0.	-----	178.	-----							
2 1305	1685	334.	-----	261.	-----	-133.	-----	675.							
2 1315	1695	-----	334.	-----	174.	-----	0.	-----							
2 1405	1745	334.	-----	87.	-----	0.	-----	265.							
2 1415	1755	-----	668.	-----	-261.	-----	222.	-----							
2 1505	1805	-334.	-----	348.	-----	-222.	-----	289.							
2 1515	1815	-----	668.	-----	-435.	-----	133.	-----							

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	PART,075	PART,075	PART,133	PART,133	PART,237	PART,237
	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
2	89.	89.	-48.	-48.	12.	12.
3	4.7E 04	-----	1.1E 04	-----	3604.	-----
4	-----	2620.	-----	819.	-----	111.
5	3.4E 04	-----	1.9E 04	-----	2152.	-----
6	-----	1.4E 04	-----	5085.	-----	418.
7	1.9E 04	-----	2.4E 04	-----	3678.	-----
8	-----	1.5E 04	-----	9809.	-----	1119.
9	4174.	-----	2.5E 04	-----	7712.	-----
10	-----	1.2E 04	-----	1.4E 04	-----	2386.
11	355.	-----	1.4E 04	-----	1.1E 04	-----
12	-----	2797.	-----	1.5E 04	-----	4379.
13	755.	-----	7399.	-----	1.0E 04	-----
14	-----	89.	-----	1.0E 04	-----	5719.
15	-444.	-----	4218.	-----	8561.	-----
16	-----	-44.	-----	5543.	-----	6162.
17	266.	-----	2362.	-----	6777.	-----
18	-----	311.	-----	2603.	-----	5449.
19	-44.	-----	0.	-----	148.	-----
20	-----	0.	-----	24.	-----	184.
21	178.	-----	48.	-----	135.	-----
22	-----	44.	-----	0.	-----	148.
23	1066.	-----	1446.	-----	271.	-----
24	-----	355.	-----	337.	-----	172.
25	89.	-----	1374.	-----	787.	-----
26	-----	178.	-----	506.	-----	283.
27	-133.	-----	675.	-----	873.	-----
28	-----	0.	-----	386.	-----	394.
29	0.	-----	265.	-----	603.	-----
30	-----	222.	-----	145.	-----	381.
31	-222.	-----	289.	-----	357.	-----
32	-----	133.	-----	120.	-----	320.

2

AFF- 71

JP-8(PET) VARIABLE FUEL
1981, APR 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 615	-165	-7.	-7.	4.	4.
1 835	-25	180.	-----	32.	-----
1 845	-15	-----	7.	-----	4.
1 1005	65	100.	-----	35.	-----
1 1015	75	-----	33.	-----	7.
1 1105	125	307.	-----	53.	-----
1 1115	135	-----	80.	-----	32.
1 1205	185	780.	-----	102.	-----
1 1215	195	-----	193.	-----	35.
1 1305	245	1447.	-----	172.	-----
1 1315	255	-----	427.	-----	53.
1 1405	305	1914.	-----	281.	-----
1 1415	315	-----	634.	-----	95.
1 1505	345	1954.	-----	298.	-----
1 1515	375	-----	967.	-----	130.
1 1605	425	1748.	-----	256.	-----
1 1615	435	-----	1121.	-----	151.
2 835	1415	93.	-----	21.	-----
2 845	1425	-----	113.	-----	35.
2 1005	1505	67.	-----	21.	-----
2 1015	1515	-----	80.	-----	25.
2 1105	1565	67.	-----	18.	-----
2 1115	1575	-----	80.	-----	21.
2 1205	1625	107.	-----	28.	-----
2 1215	1635	-----	93.	-----	18.
2 1305	1685	147.	-----	28.	-----
2 1315	1695	-----	87.	-----	18.
2 1405	1745	167.	-----	14.	-----
2 1415	1755	-----	107.	-----	18.
2 1505	1805	140.	-----	25.	-----
2 1515	1815	-----	93.	-----	21.

----- NO DATA TAKEN

NOTES

- A RETENTION TIMES ARE RESPECTIVELY: .98' 1.01' .99'
B RETENTION TIMES ARE RESPECTIVELY: .97' 1.03' .99'
C PROBABLE INTERFERENCE BY FUEL COMPONENTS ON OZONE MONITOR.

338

AFF- 72
JP8-PET, 4 DAY STATIC
1981 APRIL 14-17

DAY 1 (APRIL 14)

0600: START FILL. WET: 6.8 PSIG; DRY: 0.0 PSIG; DEW PT: 9.5C; RH: 60%
0730: INJECTED 5.5 ML NO2
0732: INJECTED 18.0 ML NO
0734: INJECTED 400 ML FREON
0740: INJECTED 1400 MICROLITERS OF JP-8(PET), 2 MINUTES OF N2 ONLY,
THEN HEAT FOR 30 MINUTES AT 250C
0900: UNCOVER BAG (T=0)
1610: END SAMPLING DAY 1

DAY 2 (APRIL 15)

0800: BAG HAS ~75% OF ITS VOLUME LEFT.
1610: END SAMPLING DAY 2

DAY 3 (APRIL 16)

0745: BAG HAS ~55-60% OF ITS VOLUME LEFT
0829-0839: INJECTED 18.0 ML NO AT 200ML N2 /MIN WHILE FILLING WITH AIR
0839-0849: INJECTED 5.5 ML NO2 AT 200 ML N2/MIN WHILE FILLING WITH AIR
1610: END SAMPLING FOR DAY 3
DILUTION FACTOR DUE TO NOX INJECTION = 0.829

DAY 4 (APRIL 17)

0800: FOG AND LOW CLOUDS
0945: FOG IS LIFTING; SUN BEGINNING TO COME OUT
1510: END OF RUN!!

RESULTS	DAY 1	DAY 2	DAY 3	DAY 4
AVG.T(DEG.C)	28(+3)	25(+7)	28(+4)	22(+5)
AVG.UV(MW/CM2)	2.5(+1.0)	2.3(+1.0)	2.2(+0.9)	1.8(+0.8)

T=0 AT 900 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	25.0	6.0	DEG C
UV RAD	EPPLEY-2	2.15	0.90	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.297	PPM
NO2-UNC	B-NOX-1	0.130	PPM
THC	BK6800-1	32.70	PPMC

330

AFF- 72
JP8-PET, 4 DAY STATIC
1981 APRIL 14-17

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
880	EG&G	EG&G DEW POINT HYGROMETER
4025	AF DMS	AF-LAB; DIMETHYLSULFOLANE GC; FID
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD

AFF- 72
 JP8-PET, 4 DAY STATIC
 1981 APRIL 14-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM B-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	NMHC PPMC BYRON	T DE DORI
1 715	-105	0.000	0.009	0.001	0.009	1.59	0.20	14
1 835	-25	0.027 A	0.297	0.130	0.432	32.70	32.00	17
1 1005	65	0.040	0.222	0.180	0.418	33.30	32.70	22
1 1105	125	0.050	0.132	0.251	0.392	32.90	34.60	25
1 1205	185	0.097	0.043	0.318	0.366	32.70	31.60	29
1 1305	245	0.207	0.012	0.298	0.300	32.20	32.00	30
1 1405	305	0.345	0.010	0.240	0.242	31.30	31.70	28
1 1505	365	0.456	0.010	0.170	0.172	30.80	30.80	29
1 1605	425	0.495	0.010	0.120	0.123	29.90	30.60	26
2 815	1395	0.352	0.010	0.052	0.060	-----	29.30	13
2 905	1445	0.344	0.010	0.053	0.061	-----	28.20	16
2 1005	1505	0.333	0.010	0.062	0.069	28.70	30.20	20
2 1105	1565	0.334	0.010	0.062	0.069	28.60	31.80	25
2 1205	1625	0.342	0.010	0.067	0.070	29.00	30.60	28
2 1305	1685	0.354	0.010	0.063	0.070	29.00	29.20	31
2 1405	1745	0.369	0.010	0.061	0.067	29.00	29.80	32
2 1505	1805	0.376	0.012	0.058	0.061	28.90	29.70	31
2 1605	1865	0.369	0.010	0.052	0.060	28.40	29.00	27
3 800	2820	0.273	0.012	0.039	0.047	30.40	26.80	16
3 905	2885	0.057	0.061	0.377	0.439	23.90	23.20	19
3 1005	2945	0.139	0.023	0.389	0.403	23.00	23.10	24
3 1105	3005	0.279	0.010	0.350	0.353	22.40	23.00	29
3 1205	3065	0.474	0.010	0.289	0.290	21.80	22.30	30
3 1305	3125	0.666	0.010	0.210	0.213	20.80	23.00	32
3 1405	3185	0.766	0.010	0.156	0.160	20.00	21.50	32
3 1505	3245	0.774	0.010	0.130	0.133	19.80	22.70	30
3 1605	3305	0.750	0.010	0.110	0.117	19.70	21.90	28
4 805	4265	0.573	0.010	0.069	0.071	17.90	20.60	13
4 905	4325	0.563	0.009	0.070	0.073	16.00	19.30	15
4 1005	4385	0.544	0.010	0.072	0.078	18.40	20.00	19
4 1105	4445	0.528	0.009	0.080	0.082	18.70	20.50	24
4 1205	4505	0.515	0.008	0.082	0.087	18.70	21.00	24
4 1305	4565	0.501	0.008	0.089	0.091	19.00	21.40	27
4 1405	4625	0.494	0.008	0.088	0.090	19.10	21.70	28
4 1505	4685	0.485	0.008	0.085	0.088	19.00	20.60	25

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

UNC M X-1	THC PPMC BK6800-1	NMHC PPMC BYRON	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	*PART>.3 PART/CC CLIMET	*PART>.5 PART/CC CLIMET
009	1.59	0.20	14.1	-----	0.1	0.	0.
432	32.70	32.00	17.5	-----	45.0	3.	0.
418	33.30	32.70	22.6	1.98	25.0	2.	0.
392	32.90	34.60	25.8	3.36	18.0	5.	0.
366	32.70	31.60	29.6	3.43	14.2	19.	0.
300	32.20	32.00	30.8	3.36	10.0	238.	20.
242	31.30	31.70	28.8	2.38	7.5	408.	179.
172	30.80	30.80	29.2	1.71	5.8	445.	300.
123	29.90	30.60	26.6	1.00	4.6	455.	336.
060	-----	29.30	13.3	0.60	0.0	361.	114.
061	-----	28.20	16.3	2.05	0.0	344.	110.
069	28.70	30.20	20.8	2.13	0.1	401.	126.
069	28.60	31.80	25.5	3.32	0.1	287.	187.
070	29.00	30.60	28.1	3.47	0.1	256.	232.
070	29.00	29.20	31.7	2.98	0.1	258.	216.
067	29.00	29.80	32.4	2.79	0.1	285.	195.
061	28.90	29.70	31.1	1.68	0.0	299.	176.
060	28.40	29.00	27.8	0.93	0.0	313.	153.
047	30.40	26.80	16.2	1.12	0.0	15.	12.
439	23.90	23.20	19.7	2.31	0.1	27.	9.
403	23.00	23.10	24.0	1.98	0.1	289.	65.
353	22.40	23.00	29.2	3.28	0.0	351.	137.
290	21.80	22.30	30.8	3.39	0.1	366.	319.
213	20.80	23.00	32.2	2.65	0.1	267.	274.
160	20.00	21.50	32.4	2.35	0.1	314.	234.
133	19.80	22.70	30.5	1.46	0.1	359.	225.
117	19.70	21.90	28.8	0.97	0.1	374.	211.
071	17.90	20.60	13.9	0.49	0.0	30.	29.
073	18.00	19.30	15.1	0.93	0.0	24.	23.
078	18.40	20.00	19.9	2.13	0.0	102.	20.
082	18.70	20.50	24.2	2.84	0.0	233.	44.
087	18.70	21.00	24.5	2.20	0.1	269.	69.
091	19.00	21.40	27.2	2.46	0.1	291.	110.
090	19.10	21.70	28.0	1.94	0.1	266.	155.
088	19.00	20.60	25.9	1.41	0.0	239.	177.

2

AFF- 72

JP8-PET, 4 DAY STATIC
1981 APRIL 14-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>1 PART/CC CLIMET	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	N-C5 PPM DMS-1	N-C10 PPM VAR 3700	N-1 PPM VAR
1 715	-105	0.	0.	494.	2.	-----	0.0036	0.1
1 835	-25	0.	17.	7.8E 04	805.	0.0008	0.0419	0.1
1 1005	65	0.	22.	4.8E 04	1058.	-----	0.0410	0.1
1 1105	125	0.	36.	3.7E 04	1434.	-----	0.0402	0.1
1 1205	185	0.	62.	2.8E 04	1896.	-----	0.0371	0.1
1 1305	245	0.	87.	2.3E 04	2249.	-----	0.0380	0.1
1 1405	305	6.	115.	1.7E 04	2403.	-----	-----	-----
1 1415	315	-----	-----	-----	-----	-----	0.0369	0.1
1 1505	365	56.	125.	1.3E 04	2301.	-----	-----	-----
1 1510	370	-----	-----	-----	-----	-----	0.0379	0.1
1 1605	425	93.	117.	1.1E 04	2024.	-----	-----	-----
1 1610	430	-----	-----	-----	-----	0.0011	0.0370	0.1
2 815	1395	4.	14.	1.2E 04	365.	0.0010	-----	-----
2 905	1445	4.	13.	1.1E 04	317.	-----	0.0511	0.1
2 1005	1505	6.	13.	1.3E 04	324.	-----	0.0371	0.1
2 1105	1565	9.	15.	1.6E 04	389.	-----	0.0360	0.1
2 1205	1625	18.	11.	9957.	343.	-----	0.0349	0.1
2 1305	1685	19.	14.	9995.	380.	-----	0.0353	0.1
2 1405	1745	20.	13.	8159.	326.	-----	0.0343	0.1
2 1505	1805	25.	13.	8163.	387.	-----	0.0342	0.1
2 1605	1865	20.	18.	1.7E 04	554.	0.0013	0.0251	0.0
3 800	2820	0.	1.	875.	32.	0.0013	0.0347	0.1
3 900	2880	-----	-----	-----	-----	0.0011	0.0278	0.0
3 905	2885	0.	5.	1235.	123.	-----	-----	-----
3 1005	2945	2.	10.	665.	151.	-----	0.0274	0.0
3 1105	3005	9.	8.	803.	111.	-----	0.0272	0.0
3 1205	3065	48.	2.	208.	38.	-----	0.0266	0.0
3 1305	3125	50.	3.	567.	62.	-----	0.0252	0.0
3 1405	3185	84.	11.	1592.	190.	-----	0.0273	0.0
3 1505	3245	87.	12.	953.	192.	-----	0.0243	0.0
3 1605	3305	81.	9.	800.	148.	0.0012	0.0276	0.0
4 805	4265	1.	1.	709.	20.	0.0014	-----	-----
4 905	4325	1.	2.	764.	54.	-----	0.0295	0.0
4 1005	4385	2.	6.	1116.	109.	-----	0.0246	0.0
4 1105	4445	3.	8.	695.	126.	-----	0.0270	0.0
4 1205	4505	4.	8.	386.	120.	-----	0.0236	0.0
4 1305	4565	6.	6.	472.	95.	-----	0.0232	0.0
4 1405	4625	8.	6.	672.	87.	-----	0.0248	0.1
4 1505	4685	12.	4.	303.	62.	0.0013	0.0252	0.0

----- NO DATA TAKEN

342

12 NOV 1981
PAGE 4

N-C5 PPM IMMS-1	N-C10 PPM VAR 3700	N-C11 PPM VAR 3700	N-C12 RAW DATA VAR 3700	N-C13 RAW DATA VAR 3700	N-C14 PPM VAR 3700	124TMEBZ PPM VAR 3700
-----	0.0036	0.0091	0.0224	0.0491	0.057	0.0078
0.0008	0.0419	0.1408	0.1282	0.1192	0.078	0.0145
-----	0.0410	0.1428	0.1545	0.1392	0.123	0.0145
-----	0.0402	0.1408	0.1480	0.1275	0.110	0.0123
-----	0.0371	0.1319	0.1255	0.1138	0.072	0.0098
-----	0.0380	0.1345	0.1290	0.1237	0.081	0.0101
-----	-----	-----	-----	-----	-----	-----
-----	0.0369	0.1256	0.1226	0.1048	0.066	0.0095
-----	-----	-----	-----	-----	-----	-----
-----	0.0379	0.1324	0.1242	0.1127	0.078	0.0100
-----	-----	-----	-----	-----	-----	-----
0.0011	0.0370	0.1298	0.1226	0.1080	0.066	0.0087
0.0010	-----	-----	-----	-----	-----	-----
-----	0.0511	0.1693	0.1464	0.1107	0.098	0.0375 B
-----	0.0371	0.1240	0.1427	0.1027	0.069	0.0116
-----	0.0360	0.1225	0.1164	0.1061	0.064	0.0093
-----	0.0349	0.1230	0.1110	0.0996	0.057	0.0085
-----	0.0353	0.1228	0.1155	0.1012	0.067	0.0096
-----	0.0343	0.1161	-----	-----	-----	0.0075
-----	0.0342	0.1167	0.1104	0.0953	0.062	0.0086
0.0013	0.0251	0.0894	0.0888	0.0799	0.055	0.0064
0.0013	0.0347	0.1131	0.1062	0.0930	0.053	0.0093
0.0011	0.0278	0.0932	0.0838	0.0683	0.036	0.0076
-----	-----	-----	-----	-----	-----	-----
-----	0.0274	0.0914	0.0931	0.0702	0.038	0.0074
-----	0.0272	0.0910	0.0818	0.0707	0.040	0.0067
-----	0.0266	0.0910	0.0864	0.0756	0.049	0.0066
-----	0.0252	0.0859	0.0789	0.0664	0.044	0.0055
-----	0.0273	0.0914	0.0866	0.0659	0.057	0.0184 B
-----	0.0243	0.0818	0.0752	0.0618	0.039	0.0048
0.0012	0.0276	0.0881	0.0876	0.0651	0.522	0.0168 B
0.0014	-----	-----	-----	-----	-----	-----
-----	0.0295	0.0849	0.0802	0.0559	0.037	0.0332 B
-----	0.0246	0.0778	0.1070	0.0586	0.033	0.0064
-----	0.0270	0.0876	0.0839	0.0659	0.062	0.0187 B
-----	0.0236	0.0763	0.0683	0.0548	0.029	0.0050
-----	0.0232	0.0765	0.0688	0.0558	0.031	0.0044
-----	0.0248	0.1030	0.0749	0.0544	0.040	0.0161 B
0.0013	0.0252	0.0793	0.0757	0.0813	0.040	0.0155 B

2

AFF- 72

JP8-PET, 4 DAY STATIC
1981 APRIL 14-17

CLOCK	ELAPSED	FREON 12	CO	CO	PAN	HCHO	DEW PT	PAR
TIME	TIME	RAW DATA	PPM	PPM	PPM	PPM	DEG C	PAR
DY	HR.	(MIN)	DMS-1	BK6800-1	BYRON	ECB-3	CA	EG&G
1	715	-105	-----	1.69	1.02	0.000	-----	9.5
1	830	-30	-----	-----	-----	-----	0.000	-----
1	835	-25	338.9	1.68	1.07	0.000	-----	-----
1	1005	65	-----	1.74	0.88	0.001	-----	38
1	1105	125	-----	1.75	-----	0.001	-----	1
1	1200	180	-----	-----	-----	-----	0.007	-----
1	1205	185	-----	2.00	1.27	0.003	-----	-3
1	1305	245	-----	1.79	1.09	0.007	-----	3
1	1405	305	-----	1.84	-----	0.014	-----	18
1	1505	365	-----	1.86	1.10	0.020	-----	1
1	1600	420	-----	-----	-----	-----	0.054	-----
1	1605	425	-----	1.88	1.12	0.028	-----	-----
1	1610	430	364.9	-----	-----	-----	-----	6
2	810	1390	-----	-----	-----	-----	0.056	-----
2	815	1395	364.5	-----	1.21	0.020	-----	23
2	905	1445	-----	-----	1.14	0.023	-----	46
2	1005	1505	-----	1.96	1.15	0.026	-----	68
2	1105	1565	-----	1.99	1.32	0.025	-----	75
2	1200	1620	-----	-----	-----	-----	0.054	-----
2	1205	1625	-----	2.02	1.38	0.024	-----	100
2	1305	1685	-----	2.00	1.38	0.022	-----	36
2	1405	1745	-----	2.15	1.50	0.019	-----	250
2	1505	1805	-----	2.10	1.54	0.015	-----	-150
2	1600	1860	-----	-----	-----	-----	0.065	-----
2	1605	1865	338.9	2.06	1.28	0.015	-----	33
3	753	2813	-----	-----	-----	-----	0.071	-----
3	800	2820	339.5	2.17	1.32	0.009	-----	14
3	900	2880	281.6	-----	-----	-----	0.039	-----
3	905	2885	-----	2.32	1.72	0.009	-----	33
3	1005	2945	-----	2.34	1.64	0.010	-----	-18
3	1105	3005	-----	2.57	1.81	0.016	-----	33
3	1200	3060	-----	-----	-----	-----	0.076	-----
3	1205	3065	-----	2.43	1.82	0.021	-----	-----
3	1305	3125	-----	2.46	1.58	0.027	-----	-----
3	1405	3185	-----	2.49	1.97	0.033	-----	50
3	1505	3245	-----	2.45	1.98	0.031	-----	-----
3	1600	3300	-----	-----	-----	-----	0.121	-----
3	1605	3305	291.8	2.54	2.15	0.034	-----	16
4	800	4260	-----	-----	-----	-----	0.145	-----
4	805	4265	283.6	2.56	1.92	0.019	-----	33
4	905	4325	-----	2.57	2.20	0.019	-----	16
4	1005	4385	-----	2.58	1.95	0.020	-----	50
4	1105	4445	-----	2.59	1.88	0.021	-----	-----
4	1200	4500	-----	-----	-----	-----	0.141	-----
4	1205	4505	-----	2.61	2.00	0.020	-----	-----
4	1305	4565	-----	2.59	2.17	0.022	-----	-----
4	1405	4625	-----	2.66	2.20	0.019	-----	33
4	1500	4680	-----	-----	-----	-----	0.134	-----
4	1505	4685	281.1	2.70	2.24	0.018	-----	-----

----- NO DATA TAKEN

343

12 NOV 1981

PAGE 5

HCHO PPM CA	DEW PT DEG C EG&G	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023
0.000	9.5	334.	87.	133.	-72.	12.
0.007	-----	-----	-----	-----	-----	-----
0.007	-----	3.6E 04	2.0E 04	1.8E 04	3615.	406.
0.007	-----	3841.	1.0E 04	2.6E 04	7158.	529.
0.007	-----	167.	957.	2.0E 04	1.4E 04	1144.
0.054	-----	-----	-----	-----	-----	-----
0.054	-----	-334.	-696.	5905.	1.9E 04	3161.
0.054	-----	334.	87.	1643.	1.5E 04	5892.
0.054	-----	1837.	-2610.	888.	8170.	7540.
0.054	-----	167.	696.	222.	3880.	7072.
0.056	-----	-----	-----	-----	-----	-----
0.056	-----	2338.	3306.	3152.	2169.	492.
0.056	-----	4676.	1392.	2131.	1856.	480.
0.056	-----	6847.	1305.	2486.	1807.	492.
0.056	-----	7515.	2001.	2886.	2434.	553.
0.054	-----	-----	-----	-----	-----	-----
0.054	-----	1002.	3480.	2309.	2555.	541.
0.054	-----	3674.	783.	2176.	2579.	676.
0.054	-----	2505.	1044.	1820.	2121.	578.
0.065	-----	-1503.	2523.	3818.	2675.	566.
0.065	-----	3340.	2175.	6349.	4073.	689.
0.071	-----	-----	-----	-----	-----	-----
0.039	-----	167.	87.	400.	169.	49.
0.039	-----	334.	-87.	0.	554.	394.
0.039	-----	-167.	174.	133.	24.	394.
0.039	-----	334.	174.	-44.	24.	221.
0.076	-----	-----	-----	-----	-----	-----
0.076	-----	0.	87.	-44.	24.	98.
0.076	-----	0.	87.	133.	193.	111.
0.076	-----	501.	-87.	133.	410.	541.
0.076	-----	0.	87.	89.	145.	492.
0.121	-----	-----	-----	-----	-----	-----
0.121	-----	167.	0.	44.	96.	381.
0.145	-----	-----	-----	-----	-----	-----
0.145	-----	334.	87.	178.	72.	25.
0.145	-----	167.	-87.	178.	386.	111.
0.145	-----	501.	-87.	133.	241.	271.
0.145	-----	0.	87.	0.	217.	307.
0.141	-----	-----	-----	-----	-----	-----
0.141	-----	0.	-87.	44.	48.	283.
0.141	-----	0.	87.	44.	48.	221.
0.134	-----	334.	0.	44.	48.	185.
0.134	-----	0.	87.	0.	24.	135.

D

AFF- 72
JP8-PET, 4 DAY STATIC
1981 APRIL 14-17

CLOCK	ELAPSED	PART,422	PART,750	
TIME	TIME	PART/CC	PART/CC	
DY	HR.	(MIN)	TSI-023	TSI-023
1	715	-105	0.	0.
1	835	-25	20.	18.
1	1005	65	27.	11.
1	1105	125	100.	11.
1	1205	185	200.	32.
1	1305	245	567.	25.
1	1405	305	827.	88.
1	1505	365	1067.	133.
1	1605	425	1127.	137.
2	815	1395	87.	18.
2	905	1445	80.	18.
2	1005	1505	87.	14.
2	1105	1565	100.	14.
2	1205	1625	67.	4.
2	1305	1685	100.	7.
2	1405	1745	80.	11.
2	1505	1805	73.	11.
2	1605	1865	80.	18.
3	800	2820	0.	4.
3	905	2885	40.	0.
3	1005	2945	93.	14.
3	1105	3005	80.	14.
3	1205	3065	47.	-4.
3	1305	3125	40.	4.
3	1405	3185	80.	14.
3	1505	3245	127.	14.
3	1605	3305	100.	11.
4	805	4265	13.	0.
4	905	4325	7.	4.
4	1005	4385	47.	11.
4	1105	4445	73.	11.
4	1205	4505	87.	11.
4	1305	4565	60.	11.
4	1405	4625	47.	14.
4	1505	4685	53.	4.

----- NO DATA TAKEN

NOTES

- A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.
- B RT TIMES OF 124TMEBZ AND N-C10 DO NOT CORRESPOND AS IN
- R CALIBRATION--SUSPECT INTERFERING PEAK W/124TMEBZ.

AFF- 73
JP8-SHALE, 4 DAY STATIC
1981 APRIL 21

DAY 1 (APRIL 21)

0600: START FILL. WET: 7.0 PSIG. DRY: 0.0 PSIG. DEW POINT: 8.5C. RH: 49%
0728: INJECTED 5.5 ML NO2
0730: INJECTED 18.0 ML NO
0732: INJECTED 400 MICROLITERS FREON 12
0738: INJECTED 1100 MICROLITERS JP-8(SHALE). 2 MINUTES OF N2 ONLY,
THEN HEAT AT 250 C FOR 30 MIN.
0900: UNCOVER BAG (T=0)
1610: SAMPLING ENDED FOR DAY 1

DAY 2 (APRIL 22)

0745: BAG HAS ~75 TO 80% OF ITS AIR REMAINING
1545: PLACED TEFLON COVER OVER BAG BECAUSE OF WINDS
1610: SAMPLING ENDED FOR DAY 2

DAY 3 (APRIL 23)

0745: BAG HAS ~55 TO 60% OF ITS AIR LEFT
0818: INJECTED 18.0 ML NO AT 200ML/MIN N2 WHILE FILLING WITH AIR.
0828: INJECTED 5.5 ML NO2 AT 200ML/MIN N2 WHILE FILLING WITH AIR.
DILUTION FACTOR DUE TO NOX INJECTION = 0.76
0955: REMOVED TEFLON COVER
1610: SAMPLING ENDED FOR DAY 3

DAY 4 (APRIL 24)

0745: LIGHT MIST IS FALLING. LOW CLOUDS AND FOG.
0930: FOG AND DRIZZLE HAVE STOPPED, STILL QUITE CLOUDY.
1200: CLOUDS HAVE CLEARED; SUNNY AND HAZY.

SHS

RESULTS	DAY 1	DAY 2	DAY 3	DAY 4
AVG.T(DEG.C)	29(+2)	32(+4)	28(+6)	21(+5)
AVG.UV(MW/CM2)	2.7(+0.9)	2.6(+0.7)	2.4(+1.1)	1.7(+1.1)

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	26.5	6.1	DEG C
UV RAD	EPPLEY-2	2.36	1.04	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.330	PPM
NO2-UNC	B-NOX-1	0.149	PPM
THC	BK6800-1	29.40	PPMC

AFF- 73
JP8-SHALE, 4 DAY STATIC
1981 APRIL 21

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	R-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015I
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EFFLEY-2	EFFLEY 14290 UV RADIOMETER; UNDER BAG
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD

AFF- 73
 JP8-SHALE, 4 DAY STATIC
 1981 APRIL 21

CLOCK BY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	NMHC PPMC BYRON	T DEC DORIC
1 715	-105	0.000	0.000	0.000	0.000	1.00	0.23	14
1 835	-25	0.007 A	0.330	0.149	0.488	29.40	30.90	19
1 1005	65	0.015	0.188	0.256	0.456	29.30	29.30	25
1 1105	125	0.053	0.033	0.378	0.403	28.40	30.80	28
1 1205	185	0.178	0.010	0.333	0.321	27.10	29.50	29
1 1305	245	0.330	0.010	0.231	0.220	25.60	28.90	31
1 1405	305	0.414	0.010	0.144	0.146	24.90	28.60	29
1 1505	365	0.417	0.009	0.115	0.115	24.50	28.80	28
1 1605	425	0.401	0.010	0.105	0.109	24.30	27.90	27
2 805	1385	0.367	0.005	0.068	0.069	23.40	26.80	21
2 905	1445	0.351	0.007	0.071	0.071	23.70	27.50	24
2 1005	1505	0.339	0.004	0.075	0.078	23.70	29.00	29
2 1105	1565	0.448 B	0.005	0.073	0.078	23.50	28.10	32
2 1205	1625	0.459	0.007	0.071	0.073	23.10	29.70	33
2 1305	1685	0.470	0.007	0.063	0.068	21.60	28.00	34
2 1405	1745	0.472	0.009	0.061	0.066	22.50	28.00	34
2 1505	1805	0.465	0.010	0.056	0.061	22.30	27.30	33
2 1605	1865	0.449	0.010	0.051	0.059	22.20	27.90	32
3 800	2820	0.324	0.003	0.033	0.037	22.00	25.80	17
3 850	2870	-----	-----	-----	-----	-----	-----	-----
3 905	2885	0.072	0.040	0.411	0.451	17.10	20.50	21
3 1005	2945	0.201	0.012	0.397	0.391	16.60	19.30	24
3 1105	3005	0.404	0.007	0.331	0.326	16.00	20.50	27
3 1205	3065	0.639	0.009	0.251	0.248	15.00	20.40	31
3 1305	3125	0.799	0.010	0.190	0.190	14.40	20.10	33
3 1405	3185	0.832	0.010	0.158	0.159	14.00	18.90	32
3 1505	3245	0.819	0.010	0.142	0.146	13.70	18.20	32
3 1605	3305	0.797	0.010	0.130	0.134	13.70	18.90	30
4 805	4265	0.584	0.001	0.070	0.071	12.70	14.50	14
4 905	4325	0.575	0.009	0.070	0.072	13.00	17.30	15
4 1005	4385	0.559	0.006	0.073	0.077	13.10	18.00	17
4 1105	4445	0.540	0.007	0.074	0.079	13.10	18.00	19
4 1205	4505	0.522	0.009	0.081	0.087	13.00	18.20	21
4 1305	4565	0.505	0.009	0.083	0.090	13.20	17.80	24
4 1405	4625	0.493	0.009	0.090	0.092	13.00	17.20	26
4 1505	4685	0.486	0.010	0.091	0.096	13.00	17.50	27

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

-UNC PM DX-1	THC PPMC BK6800-1	NMHC PPMC BYRON	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	FREON 12 RAW DATA DMS-1	CONDENS 10E3/CC CNC-143	#PART>.3 FART/CC CLIMET
.000	1.00	0.23	14.7	-----	-----	0.0	0.
.488	29.40	30.90	19.5	-----	354.3	30.0	0.
.456	29.30	29.30	25.8	2.31	-----	20.0	0.
.403	28.40	30.80	28.1	3.92	-----	18.2	1.
.321	27.10	29.50	29.3	3.55	-----	15.2	175.
.220	25.60	28.90	31.4	3.19	-----	12.0	412.
.146	24.90	28.60	29.9	2.73	-----	9.0	452.
.115	24.50	28.80	28.8	1.91	-----	6.5	451.
.109	24.30	27.90	27.4	1.37	363.5	4.8	445.
.069	23.40	26.80	21.5	1.68	375.8	0.1	189.
.071	23.70	27.50	24.0	2.73	-----	0.0	158.
.078	23.70	29.00	29.0	3.19	-----	0.0	139.
.078	23.50	28.10	32.2	3.64	-----	0.0	200.
.073	23.10	29.70	33.2	3.37	-----	0.0	256.
.068	21.60	28.00	34.8	3.37	-----	0.1	256.
.066	22.50	28.00	34.3	2.82	-----	0.1	215.
.061	22.30	27.30	33.2	1.82	-----	0.1	169.
.059	22.20	27.90	32.7	1.14	356.4	0.0	133.
.037	22.00	25.80	17.5	0.54	366.6	0.0	2.
-----	-----	-----	-----	-----	275.5	-----	-----
.451	17.10	20.50	21.5	2.00	-----	0.1	13.
.391	16.60	19.30	24.5	2.63	-----	0.2	280.
.326	16.00	20.50	27.4	3.82	-----	0.1	291.
.248	15.00	20.40	31.0	3.37	-----	0.1	244.
.190	14.40	20.10	33.4	3.37	-----	0.1	240.
.159	14.00	18.90	32.8	2.82	-----	0.1	291.
.146	13.70	18.20	32.9	1.91	-----	0.1	384.
.134	13.70	18.90	30.2	1.32	282.1	0.1	277.
.071	12.70	16.50	14.9	0.27	-----	0.0	6.
.072	13.00	17.30	15.8	0.59	285.7	0.1	5.
.077	13.10	18.00	17.5	0.72	-----	0.1	14.
.079	13.10	18.00	19.6	1.28	-----	0.1	61.
.087	13.00	18.20	21.7	2.27	-----	0.1	125.
.090	13.20	17.80	24.6	3.28	-----	0.1	157.
.092	13.00	17.20	26.8	2.91	-----	0.1	154.
.096	13.00	17.50	27.2	2.00	279.6	0.2	145.

AFF- 73
 JP8-SHALE, 4 DAY STATIC
 1981 APRIL 21

CLOCK	ELAPSED	*PART>.5	*PART>1	AER.V	AER.N	AER.S	N-C5	N-C
TIME	TIME	PART/CC	PART/CC	UM3/CC	PART/CC	UM2/CC	PPM	PP
BY HR.	(MIN)	CLIMET	CLIMET	TSI-023	TSI-023	TSI-023	DMS-1	VAR
1	715	-105	0.	0.	-0.	608.	1.	---
1	835	-25	0.	0.	2.	4.0E 04	210.	0.0003
1	1005	65	0.	0.	21.	4.0E 04	945.	0.1
1	1105	125	0.	0.	56.	3.6E 04	1855.	0.1
1	1205	185	6.	0.	101.	3.0E 04	2552.	0.1
1	1305	245	172.	6.	145.	2.4E 04	3015.	0.1
1	1405	305	298.	50.	153.	1.5E 04	2849.	0.1
1	1505	365	309.	62.	131.	1.1E 04	2311.	0.1
1	1605	425	296.	53.	106.	8910.	1797.	0.0004
2	805	1385	56.	1.	3.	595.	52.	0.0006
2	905	1445	111.	2.	3.	569.	41.	0.1
2	1005	1505	124.	5.	5.	538.	76.	0.1
2	1105	1565	110.	10.	6.	539.	103.	0.1
2	1205	1625	115.	12.	8.	872.	113.	0.1
2	1305	1685	123.	12.	7.	623.	93.	0.1
2	1405	1745	135.	10.	4.	221.	61.	0.1
2	1505	1805	124.	9.	3.	641.	47.	0.1
2	1605	1865	100.	7.	5.	296.	52.	0.0008
3	800	2820	2.	0.	2.	342.	25.	0.0009
3	850	2870	-----	-----	-----	-----	-----	0.0007
3	905	2885	1.	0.	4.	1231.	81.	0.1
3	1005	2945	56.	1.	6.	858.	108.	0.1
3	1105	3005	182.	9.	4.	458.	62.	0.09
3	1205	3065	250.	31.	2.	329.	33.	0.09
3	1305	3125	204.	43.	4.	1107.	83.	0.08
3	1405	3185	183.	62.	6.	762.	107.	0.08
3	1505	3245	172.	64.	4.	614.	74.	0.08
3	1605	3305	168.	65.	4.	513.	67.	0.0010
4	805	4265	6.	0.	1.	351.	8.	----
4	905	4325	5.	1.	0.	429.	12.	0.0011
4	1005	4385	4.	1.	3.	374.	40.	----
4	1105	4445	4.	1.	2.	1132.	43.	----
4	1205	4505	12.	1.	4.	393.	60.	----
4	1305	4565	33.	1.	2.	450.	41.	0.08
4	1405	4625	73.	2.	3.	120.	46.	0.07
4	1505	4685	92.	3.	3.	257.	45.	0.0012

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

N /CC 023	AER,S UM2/CC TSI-023	N-C5 PPM DMS-1	N-C'0 PPM VAR 3700	N-C11 PPM VAR 3700	N-C12 PPM VAR 3700	N-C13 RAW DATA VAR 3700	N-C14 PPM VAR 3700
8.	1.	-----	-----	-----	-----	-----	-----
E 04	210.	0.0003	0.1836	0.2268	0.1250	0.0578	0.022
E 04	945.	-----	0.1835	0.2253	0.1619	0.0740	0.028
E 04	1855.	-----	0.1892	0.2224	0.1411	0.0742	0.024
E 04	2552.	-----	0.1693	0.2038	0.1233	0.0631	0.018
E 04	3015.	-----	-----	-----	-----	-----	-----
E 04	2849.	-----	0.1578	0.1885	0.1173	0.0569	----- B
E 04	2311.	-----	0.1537	0.1834	0.1117	----- B	----- B
0.	1797.	0.0004	0.1521	0.1794	0.1072	0.0597	0.017
5.	52.	0.0006	-----	-----	-----	-----	-----
9.	41.	-----	0.1524	0.1873	0.1080	0.0538	0.020
8.	76.	-----	0.1432	0.1781	0.1114	0.0546	0.019
9.	103.	-----	0.1440	0.1762	0.1013	0.0527	0.021
2.	113.	-----	0.1421	0.1737	0.0993	0.0517	0.021
3.	93.	-----	0.1441	0.1739	0.1008	0.0514	0.017
1.	61.	-----	0.1420	0.1686	0.1011	0.0523	0.017
1.	47.	-----	0.1421	0.1708	0.0992	0.0517	0.017
6.	52.	0.0008	0.1407	0.1688	0.0961	0.0527	0.017
2.	25.	0.0009	0.1390	0.1640	0.0930	0.0509	0.024
---	---	0.0007	-----	-----	-----	-----	-----
1.	81.	-----	0.1068	0.1383	0.0817	0.0398	0.011
8.	108.	-----	0.1003	0.1184	0.0681	0.0344	0.012
8.	62.	-----	0.0958	0.1133	0.0657	0.0332	0.011
9.	33.	-----	0.0910	0.1075	0.0608	0.0325	0.011
7.	83.	-----	0.0887	0.1030	0.0460	0.0305	0.011
2.	107.	-----	0.0870	0.1017	0.0587	0.0302	0.012
4.	74.	-----	0.0854	0.0989	0.0565	0.0288	0.012
3.	67.	0.0010	0.0824	0.0955	0.0549	0.0296	0.012
1.	8.	-----	-----	-----	-----	-----	-----
9.	12.	0.0011	-----	-----	-----	-----	-----
4.	40.	-----	-----	-----	-----	-----	-----
2.	43.	-----	-----	-----	-----	-----	-----
6.	60.	-----	-----	-----	-----	-----	-----
0.	41.	-----	0.0817	0.0942	0.0524	0.0263	0.012
0.	46.	-----	0.0790	0.0936	0.0575	0.0316	0.012
7.	45.	0.0012	0.0759	0.0861	0.0473	0.0261	0.010

2

AFF- 73
 JP8-SHALE, 4 DAY STATIC
 1981 APRIL 21

CLOCK	ELAPSED	124TMEBZ	CO	CO	PAN	HCHO	PART.024	PAR
TIME	TIME	PPM	PPM	PPM	PPM	PPM	PART/CC	PAR
DAY	HR.	(MIN)	VAR 3700	BYRON	BK6800-1	ECD-3	CA	TSI
1	715	-105	-----	0.40	0.98	0.000	-----	501.
1	835	-25	0.0461	0.25	1.02	0.000	0.004	2.7E 04
1	1005	65	0.0373	0.30	1.07	0.001	-----	4008.
1	1105	125	0.0345	0.42	1.14	0.005	-----	3006.
1	1200	180	-----	-----	-----	-----	0.024	-----
1	1205	185	0.0309	0.35	1.16	0.013	-----	835.
1	1305	245	-----	0.65	1.20	0.031	-----	3173.
1	1405	305	0.0259	0.61	1.15	0.042	-----	-334.
1	1505	365	0.0243	0.50	1.22	0.049	-----	-935.
1	1600	420	-----	-----	-----	-----	0.077	-----
1	1605	425	0.0231	0.72	1.28	0.053	-----	334.
2	800	1380	-----	-----	-----	-----	0.098	-----
2	805	1385	-----	0.71	1.28	0.039	-----	334.
2	905	1445	0.0270	0.72	1.37	0.037	-----	334.
2	1005	1505	0.0228	0.74	1.42	0.035	-----	0.
2	1105	1565	0.0240	0.68	1.47	0.028	-----	-167.
2	1200	1620	-----	-----	-----	-----	0.099	-----
2	1205	1625	0.0216	1.01	1.53	0.020	-----	334.
2	1305	1685	0.0199	0.75	1.52	0.015	-----	167.
2	1405	1745	0.0193	0.87	1.63	0.012	-----	0.
2	1505	1805	0.0188	0.93	1.63	-----	-----	334.
2	1600	1860	-----	-----	-----	-----	0.130	-----
2	1605	1865	0.0183	0.92	1.61	0.011	-----	334.
3	753	2813	-----	-----	-----	-----	0.156	-----
3	800	2820	0.0232	1.11	1.70	0.005	-----	167.
3	855	2875	-----	-----	-----	-----	0.114	-----
3	905	2885	0.0151	1.03	1.83	0.007	-----	334.
3	1005	2945	0.0134	1.20	1.82	0.012	-----	0.
3	1105	3005	0.0118	1.34	1.89	0.024	-----	0.
3	1200	3060	-----	-----	-----	-----	0.117	-----
3	1205	3065	0.0103	1.40	1.94	0.037	-----	0.
3	1305	3125	0.0093	1.62	2.04	0.046	-----	334.
3	1405	3185	0.0085	1.68	2.00	0.050	-----	167.
3	1505	3245	0.0083	1.50	2.07	0.048	-----	167.
3	1600	3300	-----	-----	-----	-----	0.162	-----
3	1605	3305	0.0078	1.57	2.14	0.047	-----	334.
4	800	4260	-----	-----	-----	-----	0.194	-----
4	805	4265	-----	1.57	2.18	0.024	-----	334.
4	905	4325	-----	1.89	2.14	0.025	-----	334.
4	1005	4385	-----	1.72	2.18	0.026	-----	167.
4	1105	4445	-----	1.60	2.22	0.026	-----	835.
4	1200	4500	-----	-----	-----	-----	0.196	-----
4	1205	4505	-----	2.01	2.21	0.025	-----	167.
4	1305	4565	-----	1.64	2.26	0.028	-----	167.
4	1405	4625	0.0072	1.78	2.24	0.028	-----	-334.
4	1500	4680	-----	-----	-----	-----	0.185	-----
4	1505	4685	0.0065	1.67	2.34	0.028	-----	167.

----- NO DATA TAKEN

349

12 NOV 1981
PAGE 5

PAN	HCHO	PART.024	PART.042	PART.075	PART.133	PART.237	PART.422
PPM	PPM	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
ECD-3	CA	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
0.000	-----	501.	87.	44.	-24.	0.	0.
0.000	0.004	2.7E 04	8091.	4440.	530.	49.	0.
0.001	-----	4008.	5916.	2.2E 04	7158.	418.	27.
0.005	-----	3006.	522.	9857.	2.0E 04	2337.	160.
-----	0.024	-----	-----	-----	-----	-----	-----
0.013	-----	835.	2697.	355.	1.9E 04	6002.	467.
0.031	-----	3173.	-435.	44.	1.1E 04	9102.	1027.
0.042	-----	-334.	-174.	-400.	6338.	8475.	1314.
0.049	-----	-835.	1131.	-266.	3133.	6937.	1161.
-----	0.077	-----	-----	-----	-----	-----	-----
0.053	-----	334.	261.	-178.	2265.	5166.	920.
-----	0.098	-----	-----	-----	-----	-----	-----
0.039	-----	334.	0.	44.	72.	111.	27.
0.037	-----	334.	0.	89.	48.	62.	33.
0.035	-----	0.	0.	178.	169.	148.	33.
0.028	-----	-167.	174.	0.	217.	258.	47.
-----	0.099	-----	-----	-----	-----	-----	-----
0.020	-----	334.	0.	133.	96.	221.	73.
0.015	-----	167.	87.	44.	72.	185.	53.
0.012	-----	0.	0.	44.	0.	123.	47.
-----	-----	334.	174.	-44.	48.	86.	40.
-----	0.130	-----	-----	-----	-----	-----	-----
0.011	-----	334.	-261.	89.	24.	86.	7.
-----	0.156	-----	-----	-----	-----	-----	-----
0.005	-----	167.	0.	89.	48.	25.	7.
-----	0.114	-----	-----	-----	-----	-----	-----
0.007	-----	334.	174.	0.	530.	172.	13.
0.012	-----	0.	174.	178.	120.	332.	47.
0.024	-----	0.	174.	44.	24.	172.	40.
-----	0.117	-----	-----	-----	-----	-----	-----
0.037	-----	0.	87.	133.	-24.	123.	7.
0.046	-----	334.	87.	89.	362.	209.	20.
0.050	-----	167.	0.	44.	193.	308.	40.
0.048	-----	167.	0.	44.	96.	283.	20.
-----	0.162	-----	-----	-----	-----	-----	-----
0.047	-----	334.	-174.	44.	96.	172.	33.
-----	0.194	-----	-----	-----	-----	-----	-----
0.024	-----	334.	-87.	89.	-24.	49.	-13.
0.025	-----	334.	0.	-44.	120.	12.	7.
0.026	-----	167.	-174.	89.	217.	61.	7.
0.026	-----	835.	0.	-44.	193.	135.	13.
-----	0.196	-----	-----	-----	-----	-----	-----
0.025	-----	167.	-87.	0.	145.	148.	13.
0.028	-----	167.	87.	-44.	72.	148.	20.
0.028	-----	-334.	261.	-44.	96.	111.	27.
-----	0.185	-----	-----	-----	-----	-----	-----
0.028	-----	167.	-87.	-44.	96.	98.	20.

2

AFF- 73

JP8-SHALE, 4 DAY STATIC
1981 APRIL 21

CLOCK ELAPSED PART .750
TIME TIME PART/CC
DY HR. (MIN) TSI-023

1 715 -105 0.

1 835 -25 0.

1 1005 65 14.

1 1105 125 28.

1 1205 185 77.

1 1305 245 123.

1 1405 305 158.

1 1505 365 151.

1 1605 425 140.

2 805 1385 7.

2 905 1445 4.

2 1005 1505 11.

2 1105 1565 11.

2 1205 1625 14.

2 1305 1685 14.

2 1405 1745 7.

2 1505 1805 4.

2 1605 1865 18.

3 800 2820 7.

3 905 2885 7.

3 1005 2945 7.

3 1105 3005 4.

3 1205 3065 4.

3 1305 3125 7.

3 1405 3185 11.

3 1505 3245 4.

3 1605 3305 7.

4 805 4265 4.

4 905 4325 0.

4 1005 4385 7.

4 1105 4445 0.

4 1205 4505 11.

4 1305 4565 0.

4 1405 4625 4.

4 1505 4685 7.

----- NO DATA TAKEN

NOTES

A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.

B DASIBI PUMP WAS LEAKING. REPLACED DIAPHRAGM AT 1020.

AFF- 74

JP-8 (PET) VS JP-8 (SHALE)

1981 APRIL 30

DAY 1 (APRIL 30)

0430: START PURE AIR FILL. WET: 7.0, DRY: 0.0
DEW PT.=7.5, R.H.=42%
0545: END FILL
0600: 3.8 ML. NO2 INJECTED
0602: 13.0 ML. NO INJECTED
BAG MIXED AND DIVIDED
0615: 385 MICRONS JP-8 (PET) INJECTED/2 MIN., N2 ONLY,
THEN HEAT AT 250 DEGREES C FOR 30 MIN. IN SIDE A.
0650: MIX BAG SIDE A
0740: 385 MICRONS JP-S (SHALE) INJECTED INTO SIDE B.
(SAME AS SIDE A INJECTION)
0813: MIX SIDE B
0900: BAG UNCOVERED, T=0
1630: BAG COVERED FOR NIGHT
DAY 2 (MAY 1)
0800: BAG HAS 50-60% LEFT
0900: BAG UNCOVERED
1520: RUN OVER, BAG COVERED AND DUMPED.

RESULTS

DAY 1

DAY 2

AVG.T(DEG.C)	32(+4)	31(+2)
AVF.UV(MW/CM2)	2.8(+1.0)	2.8(+0.6)

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	30.1	4.9	DEG C	SIDE 1
T	DORIC-1	29.9	4.3	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.81	0.81	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.269	PPM	SIDE 1
NO	B-NOX-1	0.263	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.102	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.102	PPM	SIDE 2
THC	BK6800-1	17.40	PPMC	SIDE 1
THC	BK6800-1	23.90	PPMC	SIDE 2

AFF- 74

JP-8 (PET) VS JP-8 (SHALE)
1981 APRIL 30

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2650	VAR 3700	VARIAN GC; 30M SE-34 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD

AFF- 74
 JP-8 (PET) VS JP-8 (SHALE)
 1981 APRIL 30

	CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SII NOX- PP B-NC
1	835	25	0.016 A	-----	0.269	-----	0.102	-----	0.
1	845	-15	-----	0.001 A	-----	0.263	-----	0.102	---
1	1005	65	0.031	-----	0.174	-----	0.177	-----	0.
1	1015	75	-----	0.022	-----	0.101	-----	0.239	---
1	1105	125	0.060	-----	0.063	-----	0.271	-----	0.
1	1115	135	-----	0.152	-----	0.011	-----	0.291	---
1	1205	185	0.169	-----	0.010	-----	0.291	-----	0.
1	1215	195	-----	0.445	-----	0.009	-----	0.202	---
1	1305	245	0.361	-----	0.010	-----	0.230	-----	0.
1	1315	255	-----	0.623	-----	0.011	-----	0.134	---
1	1405	305	0.546	-----	0.012	-----	0.162	-----	0.
1	1415	315	-----	0.650	-----	0.012	-----	0.107	---
1	1505	365	0.613	-----	0.011	-----	0.120	-----	0.
1	1515	375	-----	0.633	-----	0.014	-----	0.096	---
1	1605	425	0.612	-----	0.012	-----	0.093	-----	0.
1	1615	435	-----	0.609	-----	0.013	-----	0.089	---
2	815	1395	0.445	-----	0.021	-----	0.041	-----	0.
2	825	1405	-----	0.459	-----	0.020	-----	0.039	---
2	1005	1505	0.417	-----	0.019	-----	0.042	-----	0.
2	1015	1515	-----	0.424	-----	0.021	-----	0.043	---
2	1105	1565	0.402	-----	0.020	-----	0.051	-----	0.
2	1115	1575	-----	0.407	-----	0.021	-----	0.047	---
2	1205	1625	0.398	-----	0.021	-----	0.056	-----	0.
2	1215	1635	-----	0.403	-----	0.022	-----	0.051	---
2	1305	1685	0.405	-----	0.021	-----	0.059	-----	0.
2	1315	1695	-----	0.403	-----	0.021	-----	0.053	---
2	1405	1745	0.408	-----	0.022	-----	0.059	-----	0.
2	1415	1755	-----	0.396	-----	0.022	-----	0.052	---
2	1505	1805	0.407	-----	0.021	-----	0.056	-----	0.
2	1515	1815	-----	0.388	-----	0.021	-----	0.054	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
263	0.102	-----	0.377	-----	17.40	-----
101	-----	0.102	-----	0.370	-----	23.90
011	0.177	-----	0.360	-----	17.40	-----
009	-----	0.239	-----	0.340	-----	23.20
011	0.271	-----	0.332	-----	16.80	-----
011	-----	0.291	-----	0.290	-----	21.90
013	0.291	-----	0.290	-----	16.40	-----
011	-----	0.202	-----	0.203	-----	20.70
011	0.230	-----	0.230	-----	15.70	-----
011	-----	0.134	-----	0.139	-----	19.50
012	0.162	-----	0.167	-----	14.90	-----
012	-----	0.107	-----	0.113	-----	18.80
014	0.120	-----	0.125	-----	14.20	-----
014	-----	0.096	-----	0.102	-----	18.70
013	0.093	-----	0.100	-----	13.70	-----
013	-----	0.089	-----	0.093	-----	18.50
020	0.041	-----	0.057	-----	12.90	-----
021	-----	0.039	-----	0.053	-----	18.00
021	0.042	-----	0.058	-----	13.30	-----
021	-----	0.043	-----	0.060	-----	17.80
021	0.051	-----	0.068	-----	13.40	-----
022	-----	0.047	-----	0.062	-----	17.70
022	0.056	-----	0.070	-----	13.30	-----
021	-----	0.051	-----	0.069	-----	17.60
021	0.059	-----	0.072	-----	13.20	-----
022	-----	0.053	-----	0.070	-----	17.40
022	0.059	-----	0.071	-----	12.80	-----
021	-----	0.052	-----	0.069	-----	17.20
021	0.056	-----	0.070	-----	12.90	-----
021	-----	0.054	-----	0.070	-----	17.00

2

AFF- 74
 JP-8 (PET) VS JP-8 (SHALE)
 1981 APRIL 30

	CLOCK BY HR.	ELAPSED TIME (MIN)	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SI CON 10E CNC
	1 835	-25	14.10	-----	21.0	-----	-----	31.0	--
	1 845	-15	-----	20.40	-----	21.5	-----	-----	5
	1 1005	65	15.30	-----	26.0	-----	2.68	20.0	--
	1 1015	75	-----	19.70	-----	28.1	3.37	-----	3
	1 1105	125	13.90	-----	32.2	-----	3.78	14.0	--
	1 1115	135	-----	20.00	-----	32.2	3.87	-----	2
	1 1205	185	14.30	-----	34.8	-----	3.82	12.0	--
	1 1215	195	-----	19.10	-----	33.8	3.87	-----	1
	1 1305	245	14.90	-----	35.9	-----	3.55	9.5	--
	1 1315	255	-----	18.20	-----	34.3	3.46	-----	1
	1 1405	305	15.00	-----	35.0	-----	2.63	7.5	--
	1 1415	315	-----	18.10	-----	33.7	2.45	-----	1
	1 1505	365	13.70	-----	32.1	-----	2.09	5.2	--
	1 1515	375	-----	19.00	-----	31.3	2.00	-----	--
	1 1605	425	13.80	-----	29.3	-----	1.18	4.8	--
	1 1615	435	-----	18.00	-----	29.0	1.05	-----	--
354	2 815	1395	11.20	-----	19.9	-----	-----	0.0	--
	2 825	1405	-----	17.00	-----	19.8	-----	-----	--
	2 1005	1505	13.00	-----	25.5	-----	2.59	5.8	--
	2 1015	1515	-----	18.00	-----	27.4	3.09	-----	--
	2 1105	1565	13.50	-----	29.6	-----	3.46	4.8	--
	2 1115	1575	-----	17.30	-----	30.3	3.37	-----	--
	2 1205	1625	10.70	-----	32.1	-----	3.19	3.6	--
	2 1215	1635	-----	18.20	-----	31.0	3.19	-----	--
	2 1305	1685	12.90	-----	33.5	-----	3.09	2.3	--
	2 1315	1695	-----	16.10	-----	32.3	2.96	-----	--
	2 1405	1745	13.00	-----	33.0	-----	2.45	1.7	--
	2 1415	1755	-----	16.90	-----	32.5	2.32	-----	--
	2 1505	1805	11.70	-----	32.3	-----	1.87	0.9	--
	2 1515	1815	-----	17.00	-----	31.6	1.73	-----	--

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

DE 2 T EG C IC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
-----	-----	31.0	-----	0.	-----	0.	-----
1.5	-----	-----	53.0	-----	0.	-----	0.
3.1	2.68	20.0	-----	0.	-----	0.	-----
3.78	3.37	-----	30.0	-----	0.	-----	0.
2.2	3.87	14.0	-----	0.	-----	0.	-----
3.82	3.87	-----	22.0	-----	0.	-----	0.
3.8	3.87	12.0	-----	14.	-----	0.	-----
3.55	3.87	-----	18.2	-----	129.	-----	1.
4.3	3.46	9.5	-----	332.	-----	60.	-----
2.63	2.45	-----	14.5	-----	388.	-----	109.
3.7	2.45	7.5	-----	444.	-----	250.	-----
2.09	2.45	-----	10.3	-----	425.	-----	183.
1.3	2.00	5.2	-----	458.	-----	310.	-----
1.18	2.00	-----	7.5	-----	423.	-----	195.
1.0	1.18	4.8	-----	456.	-----	319.	-----
1.05	1.05	-----	6.6	-----	415.	-----	188.
-----	-----	0.0	-----	215.	-----	47.	-----
9.8	2.59	5.8	-----	0.0	-----	232.	-----
7.4	3.09	-----	0.0	146.	-----	95.	-----
3.46	3.09	4.8	-----	209.	-----	49.	-----
0.3	3.37	-----	0.0	116.	-----	88.	-----
3.19	3.19	3.6	-----	178.	-----	97.	-----
1.0	3.19	-----	0.0	159.	-----	69.	-----
3.09	3.09	2.3	-----	189.	-----	127.	-----
2.3	2.96	-----	0.0	270.	-----	73.	-----
2.45	2.45	1.7	-----	197.	-----	117.	-----
2.5	2.32	-----	0.1	327.	-----	103.	-----
1.87	1.87	0.9	-----	187.	-----	102.	-----
1.6	1.73	-----	0.0	345.	-----	121.	-----
				166.	-----	91.	-----

AFF- 74
 JP-8 (PET) VS JP-8 (SHALE)
 1981 APRIL 30

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER. TSI-023
1	700	-120	-----	-----	-----	-----	-----	-----
1	820	-40	-----	-----	-----	-----	-----	-----
1	835	-25	0.	-----	0.	-----	0.	-----
1	845	-15	-----	0.	-----	4.	-----	1.6E 05
1	1005	65	0.	-----	8.	-----	1.0E 05	-----
1	1015	75	-----	0.	-----	8.	-----	1.6E 05
1	1105	125	0.	-----	12.	-----	7.5E 04	-----
1	1115	135	-----	0.	-----	17.	-----	1.2E 05
1	1205	185	0.	-----	16.	-----	6.6E 04	-----
1	1215	195	-----	0.	-----	31.	-----	9.5E 04
1	1305	245	0.	-----	20.	-----	6.3E 04	-----
1	1315	255	-----	1.	-----	28.	-----	9.0E 04
1	1405	305	24.	-----	25.	-----	5.9E 04	-----
1	1415	315	-----	6.	-----	26.	-----	7.6E 04
1	1505	365	60.	-----	28.	-----	4.9E 04	-----
1	1515	375	-----	8.	-----	24.	-----	6.3E 04
1	1605	425	68.	-----	22.	-----	4.1E 04	-----
1	1615	435	-----	8.	-----	23.	-----	4.8E 04
355	2	725	1345	-----	-----	-----	-----	-----
	2	815	1395	1.	-----	9.	-----	1488.
	2	825	1405	-----	0.	-----	0.	3229.
	2	1005	1505	1.	-----	4.	-----	2.7E 04
	2	1015	1515	-----	1.	-----	-1.	2863.
	2	1105	1565	1.	-----	6.	-----	2.3E 04
	2	1115	1575	-----	1.	-----	2.	1970.
	2	1205	1625	1.	-----	11.	-----	2.0E 04
	2	1215	1635	-----	3.	-----	1.	2496.
	2	1305	1685	2.	-----	9.	-----	1.7E 04
	2	1315	1695	-----	5.	-----	4.	1497.
	2	1405	1745	3.	-----	6.	-----	1.5E 04
	2	1414	1754	-----	-----	-----	-----	-----
	2	1415	1755	-----	5.	-----	2.	1589.
	2	1505	1805	4.	-----	5.	-----	1.1E 04
	2	1506	1806	-----	-----	-----	-----	-----
	2	1515	1815	-----	5.	-----	3.	1153.

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

DE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
R.V	AER.N	AER.N	AER.S	AER.S	N-C5	N-C5
3/CC	PART/CC	PART/CC	UM2/CC	UM2/CC	PPM	PPM
-023	TSI-023	TSI-023	TSI-023	TSI-023	DMS-1	DMS-1
					0.0002	
						0.0002
	0.	0.				
4.	-----	1.6E 05	-----	401.	-----	-----
	1.0E 05	-----	619.	-----	-----	-----
8.	-----	1.6E 05	-----	742.	-----	-----
	7.5E 04	-----	858.	-----	-----	-----
17.	-----	1.2E 05	-----	1305.	-----	-----
	6.6E 04	-----	1126.	-----	-----	-----
31.	-----	9.5E 04	-----	1807.	-----	-----
	6.3E 04	-----	1346.	-----	-----	-----
28.	-----	9.0E 04	-----	1881.	-----	-----
	5.9E 04	-----	1493.	-----	-----	-----
26.	-----	7.6E 04	-----	1675.	-----	-----
	4.9E 04	-----	1369.	-----	-----	-----
24.	-----	6.3E 04	-----	1381.	-----	0.0005
	4.1E 04	-----	1149.	-----	0.0005	-----
23.	-----	4.8E 04	-----	1118.	-----	-----
					0.0011	
	1488.	-----	99.	-----	-----	-----
0.	-----	3229.	-----	45.	-----	0.0004
	2.7E 04	-----	324.	-----	-----	-----
-1.	-----	2863.	-----	47.	-----	-----
	2.3E 04	-----	439.	-----	-----	-----
2.	-----	1970.	-----	65.	-----	-----
	2.0E 04	-----	464.	-----	-----	-----
1.	-----	2496.	-----	62.	-----	-----
	1.7E 04	-----	467.	-----	-----	-----
4.	-----	1497.	-----	87.	-----	-----
	1.5E 04	-----	379.	-----	-----	0.0007
2.	-----	1589.	-----	51.	-----	-----
	1.1E 04	-----	288.	-----	-----	-----
					0.0007	-----
3.	-----	1153.	-----	66.	-----	-----

2

AFF- 74

JP-8 (PET) VS JP-8 (SHALE)
1981 APRIL 30

CLOCK TIME DY	ELAPSED TIME HR.	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2	
		N-C10 PPM (MIN)	VAR 3700	N-C10 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C12 PPM	VAR 3700
1	700	-120	0.0256	-----	0.0861	-----	0.0734	-----	0.	-----	0.	-----	
1	845	-15	-----	0.1640	-----	0.1727	-----	0.1385	-----	0.	-----		
1	1005	65	0.0257	-----	0.0858	-----	0.0825	-----	0.	-----	0.	-----	
1	1115	135	-----	0.1500	-----	0.1737	-----	0.1074	-----	0.	-----		
1	1315	255	-----	0.1357	-----	0.1683	-----	0.1171	-----	0.	-----		
1	1405	305	0.0243	-----	0.0806	-----	0.0782	-----	0.	-----	0.	-----	
1	1515	375	-----	0.1291	-----	0.1547	-----	0.0949	-----	0.	-----		
1	1605	425	0.0234	-----	0.0776	-----	0.0727	-----	0.	-----	0.	-----	
2	725	1345	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
2	825	1405	-----	0.1252	-----	0.1465	-----	0.0889	-----	0.	-----		
2	1015	1515	-----	0.1191	-----	0.1412	-----	0.0860	-----	0.	-----		
2	1104	1564	0.0231	-----	0.0732	-----	0.0670	-----	0.	-----	0.	-----	
2	1214	1634	-----	0.1128	-----	0.1319	-----	0.0791	-----	0.	-----		
2	1308	1688	0.0211	-----	0.0658	-----	0.0598	-----	0.	-----	0.	-----	
2	1414	1754	-----	0.1149	-----	0.1355	-----	0.0819	-----	0.	-----		
2	1506	1806	0.0212	-----	0.0694	-----	0.0650	-----	0.	-----	0.	-----	

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

E 2 11 M 3700	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700	SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700
-----	0.0734	-----	0.0588	-----	0.034	-----
927	-----	0.1385	-----	0.0704	-----	0.025
737	0.0825	-----	0.0622	-----	0.029	-----
683	-----	0.1074	-----	0.0602	-----	0.019
547	-----	0.1171	-----	0.0929	-----	0.060
465	0.0782	-----	0.0751	-----	0.052	-----
412	-----	0.0949	-----	0.0554	-----	0.025
319	-----	0.0727	-----	0.0606	-----	0.034
355	-----	-----	-----	-----	-----	-----
412	0.0889	-----	0.0442	-----	0.013	-----
319	0.0860	-----	0.0459	-----	0.015	-----
355	0.0670	-----	0.0525	-----	0.027	-----
355	0.0791	-----	0.0437	-----	0.015	-----
355	0.0598	-----	0.0496	-----	0.025	-----
355	0.0819	-----	0.0426	-----	0.014	-----
355	0.0650	-----	0.0506	-----	0.022	-----

7

AFF- 74
 JP-8 (PET) VS JP-8 (SHALE)
 1981 APRIL 30

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		124TMEBZ PPM VAR 3700	124TMEBZ PPM VAR 3700	CO PPM BK6800-1	CO PPM BK6800-1	FAN PPM ECD-3	FAN PPM ECD-3	HC PP C
1 545	-195	-----	-----	-----	-----	0.000	0.000	---
1 700	-120	0.0089	-----	-----	-----	-----	-----	---
1 835	-25	-----	-----	0.85	-----	-----	-----	---
1 845	-15	-----	0.0314	-----	0.91	-----	0.000	---
1 853	-7	-----	-----	-----	-----	-----	-----	0.
1 1005	65	0.0072	-----	0.92	-----	-----	-----	---
1 1015	75	-----	-----	-----	0.86	-----	-----	---
1 1105	125	-----	-----	0.92	-----	0.002	-----	---
1 1115	135	-----	0.0262	-----	0.91	-----	0.011	---
1 1205	185	-----	-----	1.12	-----	-----	-----	---
1 1210	190	-----	-----	-----	-----	-----	-----	0.
1 1215	195	-----	-----	-----	0.98	-----	0.027	---
1 1305	245	-----	-----	1.24	-----	0.014	-----	---
1 1315	255	-----	0.0255	-----	1.02	-----	0.045	---
1 1405	305	0.0056	-----	1.06	-----	0.025	-----	---
1 1415	315	-----	-----	-----	1.07	-----	0.051	---
1 1505	365	-----	-----	1.04	-----	0.038	-----	---
1 1515	375	-----	0.0197	-----	1.12	-----	0.051	---
1 1605	425	0.0049	-----	1.14	-----	0.045	-----	---
1 1610	430	-----	-----	-----	-----	-----	-----	0.
1 1615	435	-----	-----	-----	1.14	-----	0.054	---
2 725	1345	0.0043	-----	-----	-----	-----	-----	---
2 810	1390	-----	-----	-----	-----	-----	-----	0.
2 815	1395	-----	-----	1.08	-----	0.014	-----	---
2 825	1405	-----	0.0199	-----	1.08	-----	0.012	---
2 1005	1505	-----	-----	1.10	-----	0.016	-----	---
2 1015	1515	-----	0.0181	-----	1.20	-----	0.016	---
2 1104	1564	0.0049	-----	-----	-----	-----	-----	---
2 1105	1565	-----	-----	1.21	-----	0.018	-----	---
2 1115	1575	-----	-----	-----	1.22	-----	0.016	---
2 1200	1620	-----	-----	-----	-----	-----	-----	0.
2 1205	1625	-----	-----	1.43	-----	0.018	-----	---
2 1214	1634	-----	0.0157	-----	-----	-----	-----	---
2 1215	1635	-----	-----	-----	1.29	-----	0.017	---
2 1305	1685	-----	-----	1.27	-----	0.019	-----	---
2 1308	1688	0.0042	-----	-----	-----	-----	-----	---
2 1315	1695	-----	-----	-----	1.33	-----	0.017	---
2 1405	1745	-----	-----	1.25	-----	0.017	-----	---
2 1414	1754	-----	0.0155	-----	-----	-----	-----	---
2 1415	1755	-----	-----	-----	1.35	-----	0.015	---
2 1505	1805	-----	-----	1.32	-----	-----	-----	---
2 1506	1806	0.0039	-----	-----	-----	-----	-----	---
2 1510	1810	-----	-----	-----	-----	-----	-----	0.
2 1515	1815	-----	-----	-----	1.38	-----	0.016	---

----- NO DATA TAKEN

357

12 NOV 1981
PAGE 7

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	PAN	PAN	HCHO	HCHO	PART.024	PART.024
	PPM	PPM	PPM	PPM	PART/CC	PART/CC
00-1	ECD-3	ECD-3	CA	CA	TSI-023	TSI-023
	0.000	0.000	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
1	-----	0.000	-----	-----	-----	1.4E 05
6	-----	-----	0.004	0.004	-----	-----
36	-----	-----	-----	-----	4.3E 04	-----
1	0.002	-----	-----	-----	7348.	-----
91	-----	0.011	-----	-----	-----	1.4E 04
8	-----	-----	-----	-----	1002.	-----
8	0.014	-----	-----	-----	-----	-1336.
2	-----	0.045	-----	-----	334.	-----
7	0.025	-----	-----	-----	-----	0.
7	-----	0.051	-----	-----	668.	-----
2	0.038	-----	-----	-----	-----	-1503.
2	-----	0.051	-----	-----	1336.	-----
4	0.045	-----	-----	-----	-----	3507.
4	-----	0.061	0.076	-----	835.	-----
4	-----	0.054	-----	-----	-----	1837.
	-----	-----	-----	-----	-----	-----
	-----	-----	0.094	0.113	-----	-----
8	0.014	-----	-----	-----	167.	-----
8	-----	0.012	-----	-----	-----	1336.
0	0.016	-----	-----	-----	1837.	-----
0	-----	0.016	-----	-----	-----	1169.
2	0.018	-----	-----	-----	334.	-----
2	-----	0.016	-----	-----	-----	-167.
2	-----	0.079	0.106	-----	-----	-----
2	0.018	-----	-----	-----	-835.	-----
2	-----	-----	-----	-----	-----	-----
9	-----	0.017	-----	-----	-----	334.
9	0.019	-----	-----	-----	-2338.	-----
3	-----	-----	-----	-----	-----	-----
3	0.017	-----	-----	-----	-----	-334.
5	0.017	-----	-----	-----	334.	-----
5	-----	0.015	-----	-----	-----	0.
5	-----	-----	-----	-----	334.	-----
8	-----	0.094	0.096	-----	-----	-----
8	-----	0.016	-----	-----	167.	-----

AFF-- 74

JP-8 (FET) VS JP-8 (SHALE)
1981 APRIL 30

	CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	S PA PA TS
	1 835	-25	-----	-----	-----	-----	-----	-----	--
	1 845	-15	-----	1.6E 04	-----	1865.	-----	0.	--
	1 1005	65	4.1E 04	-----	1.5E 04	-----	362.	-----	--
	1 1015	75	-----	4.3E 04	-----	1.7E 04	-----	193.	--
	1 1105	125	3.4E 04	-----	3.3E 04	-----	819.	-----	--
	1 1115	135	-----	5.0E 04	-----	5.2E 04	-----	1205.	--
	1 1205	185	1.0E 04	-----	5.2E 04	-----	2362.	-----	--
	1 1215	195	-----	1.2E 04	-----	8.0E 04	-----	5013.	--
	1 1305	245	696.	-----	5.6E 04	-----	6242.	-----	--
	1 1315	255	-----	0.	-----	8.2E 04	-----	7061.	--
	1 1405	305	87.	-----	4.8E 04	-----	1.2E 04	-----	--
	1 1415	315	-----	2175.	-----	6.7E 04	-----	8194.	--
	1 1505	365	-435.	-----	3.6E 04	-----	1.2E 04	-----	--
	1 1515	375	-----	870.	-----	5.2E 04	-----	7061.	--
	1 1605	425	609.	-----	2.8E 04	-----	1.1E 04	-----	--
	1 1615	435	-----	609.	-----	3.9E 04	-----	6555.	--
358	2 815	1395	-348.	-----	1376.	-----	265.	-----	--
	2 825	1405	-----	174.	-----	1154.	-----	602.	--
	2 1005	1505	1.3E 04	-----	1.1E 04	-----	627.	-----	--
	2 1015	1515	-----	174.	-----	1243.	-----	241.	--
	2 1105	1565	435.	-----	2.1E 04	-----	843.	-----	--
	2 1115	1575	-----	87.	-----	1465.	-----	627.	--
	2 1205	1625	-522.	-----	2.0E 04	-----	1277.	-----	1
	2 1215	1635	-----	348.	-----	1199.	-----	578.	--
	2 1305	1685	261.	-----	1.6E 04	-----	2771.	-----	--
	2 1315	1695	-----	261.	-----	1066.	-----	434.	--
	2 1405	1745	-87.	-----	1.2E 04	-----	2506.	-----	1
	2 1415	1755	-----	0.	-----	1110.	-----	506.	--
	2 1505	1805	0.	-----	8791.	-----	2362.	-----	--
	2 1515	1815	-----	-174.	-----	666.	-----	410.	--

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

IDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
RT.075	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
RT/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
I-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
-----	-----	-----	-----	-----	-----	-----
865.	-----	0.	-----	49.	-----	40.
.7E 04	362.	-----	37.	-----	7.	-----
.62E 04	-----	193.	-----	0.	-----	7.
8.0E 04	819.	-----	62.	-----	7.	-----
8.2E 04	-----	1205.	-----	0.	-----	27.
8.2E 04	2362.	-----	12.	-----	0.	-----
8.0E 04	-----	5013.	-----	49.	-----	0.
8.2E 04	6242.	-----	49.	-----	0.	-----
8.2E 04	-----	7061.	-----	160.	-----	0.
8.7E 04	1.2E 04	-----	-49.	-----	20.	-----
8.7E 04	8194.	-----	74.	-----	0.	-----
8.2E 04	1.2E 04	-----	406.	-----	-40.	-----
8.2E 04	7061.	-----	258.	-----	20.	-----
8.9E 04	1.1E 04	-----	0.	-----	53.	-----
8.9E 04	6555.	-----	86.	-----	20.	-----
-----	265.	-----	12.	-----	-27.	-----
1154.	-----	602.	-----	-25.	-----	-13.
1243.	627.	-----	37.	-----	7.	-----
1465.	-----	241.	-----	-37.	-----	93.
1465.	843.	-----	25.	-----	13.	-----
1465.	627.	-----	-49.	-----	0.	-----
1199.	1277.	-----	172.	-----	-73.	-----
1066.	-----	578.	-----	37.	-----	0.
1066.	2771.	-----	98.	-----	7.	-----
1110.	434.	-----	0.	-----	67.	-----
1110.	2506.	-----	172.	-----	-20.	-----
1110.	506.	-----	-37.	-----	7.	-----
666.	2362.	-----	0.	-----	0.	-----
666.	-----	410.	-----	74.	-----	0.

2

AFF- 74

JP-8 (PET) VS JP-8 (SHALE)

1981 APRIL 30

		SIDE 1	SIDE 2
CLOCK	ELAPSED	PART.750	PART.750
TIME	TIME	PART/CC	PART/CC
DY HR.	(MIN)	TSI-023	TSI-023

1	835	-25	-----
1	845	-15	-----
1	1005	65	7.
1	1015	75	-----
1	1105	125	7.
1	1115	135	-----
1	1205	185	7.
1	1215	195	-----
1	1305	245	0.
1	1315	255	-----
1	1405	305	0.
1	1415	315	-----
1	1505	365	18.
1	1515	375	-----
1	1605	425	0.
1	1615	435	-----
2	815	1395	42.
2	825	1405	-----
2	1005	1505	0.
2	1015	1515	-----
2	1105	1565	0.
2	1115	1575	-----
2	1205	1625	32.
2	1215	1635	-----
2	1305	1685	4.
2	1315	1695	-----
2	1405	1745	0.
2	1415	1755	-----
2	1505	1805	0.
2	1515	1815	-----

----- NO DATA TAKEN

NOTES

A THE NEPHELOMETER WAS LEAKING SOME ROOM AIR INTO THE SAMPLE
A MANIFOLD. THE NEPH WAS BYPASSED, BUT THE BACKGROUND VALUES
A ARE NO GOOD. ALSO, THE WHITBY DATA FOR SIDE A, PRET=0, ARE
A NO GOOD, DATA FOR SIDE B ARE O.K.
B RT=.99
A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.

AFF- 75
JP-8(SHALE) VERSUS JP-8(PET)
1981, MAY 5,6

DAY 1 (MAY 5)

0500: START FILL. WET: 7.0; DRY: 0.0; DEW POINT: 6.8; R.H.=47%
0628: INJECTED 3.8 ML NO2
0630: INJECTED 14.0 ML NO
0636: DIVIDE BAG
0650: INJECTED 385 MICROLITERS JP-8 (SHALE) INTO SIDE A; INJECTED
385 MICROLITERS JP-8 (PET) INTO SIDE B. 2 MINUTES OF N2 ONLY
THEN HEAT TO 250C FOR 30 MINUTES. BOTH SIDES INJECTED SIMULTANEOUSLY.
0905: WEATHER: SOME LOW CLOUDS, APPEARS TO BE BURNING OFF.
1120: STILL A LOT OF CLOUDS
1620: RUN FINISHED FOR DAY 1.
1630: COVERED BAG.

DAY 2 (MAY 6)

0900: UNCOVER BAG
1620: RUN OVER; BAG DUMPED AND PURGED.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	26(+/-2)	28(+/-2)
AVG.UV(MW/CM2)	2.2(+/-0.8)	3.0(+/-0.7)

NOTE: NO TSI-023 DATA FOR DAY 2 BECAUSE OF INSTRUMENT MALFUNCTION.

T=0 AT 900 PST

360
090

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	25.1	4.5	DEG C
T	DORIC-1	24.7	3.9	DEG C
UV RAD	EPFLEY-2	2.57	0.80	MW/CM2

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.297	PPM	SIDE 1
NO	B-NOX-1	0.293	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.101	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.101	PPM	SIDE 2
THC	BK6800-1	21.80	PPMC	SIDE 1
THC	BK6800-1	19.20	PPMC	SIDE 2

AFF- 75
JP-8(SHALE) VERSUS JP-8(PET)
1981, MAY 5,6

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPTIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD

AFF- 75

JP-8(SHALE) VERSUS JP-8(PET)
1981, MAY 5, 6

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1
		OZONE PPM	D-1790	OZONE PPM	D-1790	NO PPM	B-NOX-1	NO PPM	B-NOX-1	NO2-UNC PPM	B-NOX-1	NO2-UNC PPM	B-NOX-1	NOX PPM
1 615	-165	0.000		0.000		0.011		0.011		0.007		0.007		0
1 835	-25	0.008	A	-----		0.297		-----		0.101		-----		0
1 845	-15	-----		0.023	A	-----		0.293		-----		0.101		-----
1 1005	65	0.011		-----		0.209		-----		0.163		-----		0
1 1015	75	-----		0.042		-----		0.137		-----		0.219		-----
1 1105	125	0.034		-----		0.095		-----		0.255		-----		0
1 1115	135	-----		0.047		-----		0.042		-----		0.293		-----
1 1205	185	0.100		-----		0.021		-----		0.309		-----		0
1 1215	195	-----		0.142		-----		0.018		-----		0.297		-----
1 1305	245	0.238		-----		0.013		-----		0.263		-----		0
1 1315	255	-----		0.256		-----		0.013		-----		0.251		-----
1 1405	305	0.405		-----		0.013		-----		0.207		-----		0
1 1415	315	-----		0.357		-----		0.012		-----		0.207		-----
1 1505	365	0.474		-----		0.013		-----		0.152		-----		0
1 1515	375	-----		0.438		-----		0.012		-----		0.162		-----
1 1605	425	0.506		-----		0.012		-----		0.120		-----		0
1 1615	435	-----		0.451		-----		0.012		-----		0.130		-----
362	2 835	1415	0.354	-----		0.013		-----		0.050		-----		0
	2 845	1425	-----	0.299		-----		0.016		-----		0.051		-----
	2 1005	1505	0.332	-----		0.013		-----		0.063		-----		0
	2 1015	1515	-----	0.293		-----		0.013		-----		0.042		-----
	2 1105	1565	0.332	-----		0.011		-----		0.070		-----		0
	2 1115	1575	-----	0.308		-----		0.015		-----		0.046		-----
	2 1205	1625	0.344	-----		0.010		-----		0.071		-----		0
	2 1215	1635	-----	0.326		-----		0.011		-----		0.057		-----
	2 1305	1685	0.361	-----		0.010		-----		0.071		-----		0
	2 1315	1695	-----	0.344		-----		0.011		-----		0.050		-----
	2 1405	1745	0.374	-----		0.011		-----		0.068		-----		0
	2 1415	1755	-----	0.350		-----		0.010		-----		0.051		-----
	2 1505	1805	0.376	-----		0.009		-----		0.070		-----		0
	2 1515	1815	-----	0.353		-----		0.010		-----		0.052		-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

DE 2 NO PM OX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
.011	0.007	0.007	0.016	0.016	0.84	0.84
----	0.101	-----	0.400	-----	21.80	-----
.293	-----	0.101	-----	0.393	-----	19.20
----	0.163	-----	0.381	-----	22.00	-----
.137	-----	0.219	-----	0.362	-----	18.80
----	0.255	-----	0.357	-----	21.70	-----
.042	-----	0.293	-----	0.337	-----	18.10
----	0.309	-----	0.322	-----	21.20	-----
.018	-----	0.297	-----	0.305	-----	17.90
----	0.263	-----	0.271	-----	20.40	-----
.013	-----	0.251	-----	0.259	-----	17.50
----	0.207	-----	0.211	-----	19.40	-----
.012	-----	0.207	-----	0.213	-----	16.60
----	0.152	-----	0.160	-----	18.60	-----
.012	-----	0.162	-----	0.170	-----	16.20
----	0.120	-----	0.128	-----	18.50	-----
.012	-----	0.130	-----	0.138	-----	16.00
-----	0.050	-----	0.061	-----	17.10	-----
.016	-----	0.051	-----	0.062	-----	15.10
----	0.063	-----	0.072	-----	18.00	-----
.013	-----	0.042	-----	0.051	-----	15.20
----	0.070	-----	0.077	-----	17.20	-----
.015	-----	0.046	-----	0.057	-----	15.20
----	0.071	-----	0.079	-----	17.10	-----
.011	-----	0.057	-----	0.064	-----	15.00
----	0.071	-----	0.079	-----	16.80	-----
.011	-----	0.050	-----	0.059	-----	14.80
----	0.068	-----	0.074	-----	16.70	-----
.010	-----	0.051	-----	0.060	-----	14.60
----	0.070	-----	0.078	-----	16.50	-----
.010	-----	0.052	-----	0.060	-----	14.40

2

AFF- 75
 JP-8(SHALE) VERSUS JP-8(PET)
 1981, MAY 5, 6

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		UV RAD MW/CM ² EPPLEY-2	CONDENS 10E3/CC CNC-143	SIDE 1		SIDE 2		#PART>.3 PART/CC CLIMET	SID #PAR CLI
		T DEG C DORIC-1	T DEG C DORIC-1	MW/CM ² EPPLEY-2	CONDENS 10E3/CC CNC-143			CONDENS 10E3/CC CNC-143	PART/CC				
1 615	-165	15.0	15.0	-----	0.0	-----	0.0	-----	0.	-----	0.	---	
1 835	-25	17.9	-----	-----	40.0	-----	-----	-----	0.	-----	0.	---	
1 845	-15	-----	18.3	-----	-----	-----	74.0	-----	-----	-----	-----	2	
1 1005	65	21.8	-----	2.27	24.0	-----	-----	-----	0.	-----	0.	---	
1 1015	75	-----	24.9	3.00	-----	-----	37.0	-----	-----	-----	0.	---	
1 1105	125	25.8	-----	2.73	19.0	-----	-----	-----	0.	-----	0.	2	
1 1115	135	-----	24.6	1.71	-----	-----	28.0	-----	-----	-----	0.	---	
1 1205	185	25.9	-----	3.46	14.0	-----	-----	-----	0.	-----	0.	---	
1 1215	195	-----	26.2	3.46	-----	-----	20.0	-----	-----	-----	11	---	
1 1305	245	29.9	-----	2.82	12.0	-----	-----	-----	34.	-----	34.	---	
1 1315	255	-----	27.5	2.54	-----	-----	17.0	-----	-----	-----	27	---	
1 1405	305	28.5	-----	2.18	9.0	-----	-----	-----	283.	-----	283.	---	
1 1415	315	-----	26.3	1.82	-----	-----	13.5	-----	-----	-----	37	---	
1 1505	365	25.7	-----	1.46	7.0	-----	-----	-----	387.	-----	387.	---	
1 1515	375	-----	24.0	1.37	-----	-----	11.0	-----	-----	-----	41	---	
1 1605	425	24.6	-----	1.23	5.0	-----	-----	-----	408.	-----	408.	---	
1 1615	435	-----	23.8	1.14	-----	-----	8.0	-----	-----	-----	42	---	
2 835	1415	19.7	-----	-----	0.0	-----	-----	-----	222.	-----	222.	---	
2 845	1425	-----	19.9	-----	-----	-----	0.1	-----	-----	-----	29	---	
2 1005	1505	24.0	-----	2.86	0.6	-----	-----	-----	178.	-----	178.	---	
2 1015	1515	-----	26.0	3.28	-----	-----	0.8	-----	-----	-----	32	---	
2 1105	1565	26.8	-----	3.55	0.4	-----	-----	-----	152.	-----	152.	---	
2 1115	1575	-----	26.8	3.64	-----	-----	0.7	-----	-----	-----	30	---	
2 1205	1625	28.0	-----	3.46	0.2	-----	-----	-----	213.	-----	213.	---	
2 1215	1635	-----	27.7	3.46	-----	-----	0.5	-----	-----	-----	30	---	
2 1305	1685	30.2	-----	3.37	0.1	-----	-----	-----	280.	-----	280.	---	
2 1315	1695	-----	29.0	3.28	-----	-----	0.4	-----	-----	-----	32	---	
2 1405	1745	29.6	-----	2.36	0.0	-----	-----	-----	305.	-----	305.	---	
2 1415	1755	-----	28.3	2.27	-----	-----	0.2	-----	-----	-----	34	---	
2 1505	1805	29.0	-----	1.96	0.0	-----	-----	-----	259.	-----	259.	---	
2 1515	1815	-----	27.6	1.87	-----	-----	0.1	-----	-----	-----	32	---	

----- NO DATA TAKEN

363

12 NOV 1981
PAGE 4

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	0.	-----	0.	-----	0.	-----
74.0	-----	20.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
37.0	-----	25.	-----	1.	-----	0.
-----	0.	-----	0.	-----	0.	-----
28.0	-----	39.	-----	1.	-----	0.
-----	0.	-----	0.	-----	0.	-----
20.0	-----	116.	-----	3.	-----	0.
-----	34.	-----	0.	-----	0.	-----
17.0	-----	272.	-----	30.	-----	0.
-----	283.	-----	35.	-----	0.	-----
13.5	-----	378.	-----	118.	-----	1.
-----	387.	-----	139.	-----	2.	-----
11.0	-----	416.	-----	193.	-----	9.
-----	408.	-----	192.	-----	9.	-----
8.0	-----	425.	-----	226.	-----	18.
-----	222.	-----	30.	-----	0.	-----
0.1	-----	297.	-----	69.	-----	1.
-----	178.	-----	47.	-----	0.	-----
0.8	-----	324.	-----	93.	-----	3.
-----	152.	-----	72.	-----	1.	-----
0.7	-----	300.	-----	123.	-----	5.
-----	213.	-----	82.	-----	2.	-----
0.5	-----	305.	-----	152.	-----	8.
-----	280.	-----	97.	-----	3.	-----
0.4	-----	322.	-----	166.	-----	11.
-----	305.	-----	102.	-----	3.	-----
0.2	-----	340.	-----	179.	-----	13.
-----	259.	-----	79.	-----	3.	-----
0.1	-----	326.	-----	157.	-----	11.

2

AFF- 75
 JP-8(SHALE) VERSUS JP-8(PET)
 1981, MAY 5, 6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
		BSCAT MRI-388	BSCAT MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	PART/CC TSI-023	PART/CC TSI-023	AER.N UM2/ TSI-023
1 615	-165	-----	-----	-1.	-1.	108.	108.	7
1 735	-85	-----	-----	-----	-----	-----	-----	-----
1 835	-25	-----	-----	4.	-----	1.3E -5	-----	337
1 945	-15	-----	-----	-----	22.	-----	3.4E 05	-----
1 1005	65	-----	-----	11.	-----	1.1E 05	-----	504
1 1015	75	-----	-----	-----	26.	-----	1.8E 05	-----
1 1105	125	-----	-----	10.	-----	9.2E 04	-----	688
1 1115	135	-----	-----	-----	19.	-----	1.5E 05	-----
1 1205	185	-----	-----	11.	-----	7.3E 04	-----	886
1 1215	195	-----	-----	-----	25.	-----	1.1E 05	-----
1 1305	245	-----	-----	12.	-----	6.5E 04	-----	1084
1 1315	255	-----	-----	-----	25.	-----	9.2E 04	-----
1 1405	305	-----	-----	21.	-----	5.9E 04	-----	1229
1 1415	315	-----	-----	-----	31.	-----	8.2E 04	-----
1 1505	365	-----	-----	18.	-----	5.6E 04	-----	1141
1 1515	375	-----	-----	-----	26.	-----	7.4E 04	-----
1 1605	425	-----	-----	17.	-----	4.3E 04	-----	1020
1 1615	435	-----	-----	-----	22.	-----	5.7E 04	-----
2 720	1340	-----	-----	-----	-----	-----	-----	-----
2 835	1415	-----	-----	-----	-----	-----	-----	-----
2 1005	1505	1.6	-----	-----	-----	-----	-----	-----
2 1015	1515	-----	1.2	-----	-----	-----	-----	-----
2 1105	1565	2.2	-----	-----	-----	-----	-----	-----
2 1115	1575	-----	1.2	-----	-----	-----	-----	-----
2 1205	1625	2.4	-----	-----	-----	-----	-----	-----
2 1215	1635	-----	0.9	-----	-----	-----	-----	-----
2 1305	1685	2.7	-----	-----	-----	-----	-----	-----
2 1315	1695	-----	0.9	-----	-----	-----	-----	-----
2 1405	1745	2.8	-----	-----	-----	-----	-----	-----
2 1415	1755	-----	1.1	-----	-----	-----	-----	-----
2 1505	1805	2.2	-----	-----	-----	-----	-----	-----
2 1515	1815	-----	1.1	-----	-----	-----	-----	-----

----- NO DATA TAKEN

494

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700
108.	108.	7.	7.	-----	-----
1.3E 05	-----	337.	-----	0.1565	-----
3.4E 05	-----	2206.	-----	0.0272	-----
1.1E 05	-----	504.	-----	0.1457	-----
1.8E 05	-----	1809.	-----	-----	-----
9.2E 04	-----	688.	-----	-----	-----
1.5E 05	-----	1600.	-----	0.0271	-----
7.3E 04	-----	886.	-----	0.1438	-----
1.1E 05	-----	1685.	-----	-----	-----
6.5E 04	-----	1084.	-----	-----	-----
9.2E 04	-----	1707.	-----	0.0252	-----
5.9E 04	-----	1229.	-----	0.1315	-----
8.2E 04	-----	1720.	-----	-----	-----
5.6E 04	-----	1141.	-----	-----	-----
7.4E 04	-----	1578.	-----	0.0235	-----
4.3E 04	-----	1020.	-----	0.1250	-----
5.7E 04	-----	1349.	-----	-----	-----
-----	-----	-----	-----	0.0187	-----
-----	-----	-----	-----	0.1223	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0594	-----
-----	-----	-----	-----	0.1158	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0379	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0408	-----
-----	-----	-----	-----	0.1135	-----
-----	-----	-----	-----	-----	-----

Z

AFF- 75
 JP-8(SHALE) VERSUS JP-8(PET)
 1981, MAY 5, 6

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SID
		N-C11 PPM VAR 3700	N-C11 PPM VAR 3700	N-C12 PPM VAR 3700	N-C12 PPM VAR 3700	N-C13 PPM VAR 3700	N-C							
1 735	-85	0.1733	-----	0.1120	-----	0.0646	-----	0.0646	-----	0.0646	-----	0.		
1 845	-15	-----	0.0874	-----	0.0930	-----	0.0930	-----	0.0930	-----	0.0930	-----		
1 1005	65	0.1656	-----	0.1136	-----	0.0591	-----	0.0591	-----	0.0591	-----	0.		
1 1115	135	-----	0.0888	-----	0.0958	-----	0.0958	-----	0.0958	-----	0.0958	-----		
1 1205	185	0.1639	-----	0.1136	-----	0.0600	-----	0.0600	-----	0.0600	-----	0.		
1 1315	255	-----	0.0825	-----	0.0862	-----	0.0862	-----	0.0862	-----	0.0862	-----		
1 1405	305	0.1575	-----	0.1092	-----	0.0568	-----	0.0568	-----	0.0568	-----	0.		
1 1515	375	-----	0.0779	-----	0.0789	-----	0.0789	-----	0.0789	-----	0.0789	-----		
1 1605	425	0.1503	-----	0.1014	-----	0.0534	-----	0.0534	-----	0.0534	-----	0.		
2 720	1340	-----	0.0561	-----	0.0577	-----	0.0577	-----	0.0577	-----	0.0465	-----		
2 835	1415	0.1406	-----	0.0903	-----	0.0446	-----	0.0446	-----	0.0446	-----	0.		
2 1015	1515	-----	0.0753	-----	0.0528	-----	0.0528	-----	0.0528	-----	0.0294	-----		
2 1105	1565	0.1340	-----	0.0839	-----	0.0383	-----	0.0383	-----	0.0383	-----	0.		
2 1215	1635	-----	0.0639	-----	0.0485	-----	0.0485	-----	0.0485	-----	0.0337	-----		
2 1415	1755	-----	0.0501	-----	0.0334	-----	0.0334	-----	0.0334	-----	0.0193	-----		
2 1505	1805	0.1302	-----	0.0806	-----	0.0354	-----	0.0354	-----	0.0354	-----	0.		

----- NO DATA TAKEN

565

12 NOV 1981
PAGE 6

SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 2 124TMEBZ PPM VAR 3700
0.0646	-----	0.046	-----	0.0322	-----
-----	0.0817	-----	0.081	-----	0.0086
0.0591	-----	0.033	-----	0.0277	-----
-----	0.0795	-----	0.062	-----	0.0073
0.0600	-----	0.030	-----	0.0250	-----
-----	0.0730	-----	0.055	-----	0.0063
0.0568	-----	0.028	-----	0.0220	-----
-----	0.0629	-----	0.049	-----	0.0051
0.0534	-----	0.026	-----	0.0192	-----
-----	0.0465	-----	0.033	-----	0.0047
0.0446	-----	0.024	-----	0.0195	-----
-----	0.0294	-----	0.019	-----	0.0102
0.0383	-----	0.015	-----	0.0173	-----
-----	0.0337	-----	0.021	-----	0.0065
-----	0.0193	-----	0.014	-----	0.0058
0.0354	-----	0.015	-----	0.0152	-----

2

AFF- 75
JP-8(SHALE) VERSUS JP-8(FET)
1981, MAY 5,6

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		S PA TS
		CO PPM	BK6800-1	CO PPM	BK6800-1	PAN PPM	ECD-3	PAN PPM	ECD-3	HCHO PPM	CA	HCHO PPM	CA	
1 615	-165	0.62		0.62		0.000		0.000		-----		-----		-
1 830	-30	-----		-----		-----		-----		0.008		0.008		-
1 835	-25	0.66		-----		0.000		-----		-----		-----		1
1 845	-15	-----		0.70		-----		0.000		-----		-----		-
1 1005	65	0.64		-----		0.001		-----		-----		-----		6
1 1015	75	-----		0.72		-----		0.002		-----		-----		-
1 1105	125	0.63		-----		0.003		-----		-----		-----		2
1 1115	135	-----		0.71		-----		0.006		-----		-----		-
1 1200	180	-----		-----		-----		-----		0.012		0.026		-
1 1205	185	0.69		-----		0.008		-----		-----		-----		6
1 1215	195	-----		0.76		-----		0.012		-----		-----		-
1 1305	245	0.70		-----		0.017		-----		-----		-----		3
1 1315	255	-----		0.81		-----		0.019		-----		-----		-
1 1405	305	0.74		-----		0.033		-----		-----		-----		1
1 1415	315	-----		0.80		-----		0.032		-----		-----		-
1 1505	365	0.74		-----		0.051		-----		-----		-----		4
1 1515	375	-----		0.81		-----		0.044		-----		-----		-
1 1605	425	0.73		-----		0.058		-----		-----		-----		-
1 1610	430	-----		-----		-----		-----		0.045		0.039		-
1 1615	435	-----		0.85		-----		0.055		-----		-----		-
366														
2 820	1400	-----		-----		-----		-----		0.073		0.070		-
2 835	1415	0.80		-----		0.035		-----		-----		-----		-
2 845	1425	-----		0.83		-----		0.034		-----		-----		-
2 1005	1505	0.77		-----		-----		-----		-----		-----		-
2 1015	1515	-----		0.89		-----		0.015		-----		-----		-
2 1105	1565	0.85		-----		0.041		-----		-----		-----		-
2 1115	1575	-----		0.92		-----		0.025		-----		-----		-
2 1200	1620	-----		-----		-----		-----		0.076		0.073		-
2 1205	1625	0.85		-----		0.042		-----		-----		-----		-
2 1215	1635	-----		0.95		-----		0.024		-----		-----		-
2 1305	1685	0.90		-----		-----		-----		-----		-----		-
2 1315	1695	-----		0.98		-----		0.012		-----		-----		-
2 1405	1745	0.96		-----		0.038		-----		-----		-----		-
2 1415	1755	-----		0.94		-----		0.016		-----		-----		-
2 1505	1805	1.04		-----		0.040		-----		-----		-----		-
2 1510	1810	-----		-----		-----		-----		0.096		0.077		-
2 1515	1815	-----		1.04		-----		0.016		-----		-----		-

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

DE 2 AN PM D-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023
.000	-----	-----	167.	167.	-348.	-348.
-----	0.008	0.008	-----	-----	-----	-----
-----	-----	-----	1.1E 05	-----	1.3E 04	-----
,000	-----	-----	-----	1.3E 05	-----	1.5E 05
-----	-----	-----	6.7E 04	-----	3.5E 04	-----
.002	-----	-----	-----	3.4E 04	-----	7.5E 04
-----	-----	-----	2.9E 04	-----	4.3E 04	-----
,006	-----	-----	-----	2.8E 04	-----	4.7E 04
-----	0.012	0.026	-----	-----	-----	-----
-----	-----	-----	6012.	-----	2.9E 04	-----
.012	-----	-----	-----	501.	-----	2.8E 04
-----	-----	-----	3006.	-----	8613.	-----
,019	-----	-----	-----	167.	-----	9657.
-----	-----	-----	1169.	-----	87.	-----
.032	-----	-----	-----	167.	-----	1479.
-----	-----	-----	4342.	-----	696.	-----
,044	-----	-----	-----	2839.	-----	2523.
-----	-----	-----	835.	-----	174.	-----
.045	0.045	0.039	-----	-----	-----	-----
.055	-----	-----	-----	-2672.	-----	1044.
-----	0.073	0.070	-----	-----	-----	-----
.034	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
.015	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
.025	-----	-----	-----	-----	-----	-----
-----	0.076	0.073	-----	-----	-----	-----
.024	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
.012	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
.016	-----	-----	-----	-----	-----	-----
-----	0.096	0.077	-----	-----	-----	-----
.016	-----	-----	-----	-----	-----	-----

2

AFF- 75

JP-8(SHALE) VERSUS JP-8(PET)
1981, MAY 5, 6

	CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SI PAR TSI
1	615	-165	0.	0.	193.	193.	123.	123.	-
1	835	-25	1954.	-----	72.	-----	-12.	-----	-----
1	845	-15	-----	6.1E 04	-----	964.	-----	37.	--
1	1005	65	6971.	-----	-96.	-----	37.	-----	-----
1	1015	75	-----	6.7E 04	-----	1735.	-----	0.	--
1	1105	125	2.0E 04	-----	410.	-----	12.	-----	-----
1	1115	135	-----	7.2E 04	-----	-----	-----	-----	-----
1	1205	185	3.7E 04	-----	964.	-----	135.	-----	-
1	1215	195	-----	7.7E 04	-----	2868.	-----	37.	--
1	1305	245	5.1E 04	-----	2265.	-----	0.	-----	-----
1	1315	255	-----	7.8E 04	-----	4603.	-----	25.	--
1	1405	305	5.3E 04	-----	4290.	-----	61.	-----	-----
1	1415	315	-----	7.4E 04	-----	6145.	-----	25.	--
1	1505	365	4.4E 04	-----	6507.	-----	-12.	-----	-
1	1515	375	-----	6.1E 04	-----	7905.	-----	49.	--
1	1605	425	3.5E 04	-----	6700.	-----	185.	-----	-
1	1615	435	-----	5.0E 04	-----	8001.	-----	61.	--

----- NO DATA TAKEN

NOTES

A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.

12 NOV 1981
PAGE 8

IDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
RT.133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
RT/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
I-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
193.	123.	123.	-20.	-20.	-7.	-7.
-----	-12.	-----	47.	-----	0.	-----
964.	-----	37.	-----	0.	-----	0.
-----	37.	-----	20.	-----	32.	-----
735.	-----	0.	-----	0.	-----	25.
-----	12.	-----	-7.	-----	14.	-----
-----	-----	-----	-----	33.	-----	0.
-----	135.	-----	-60.	-----	7.	-----
868.	-----	37.	-----	-67.	-----	25.
-----	0.	-----	80.	-----	-25.	-----
603.	-----	25.	-----	-13.	-----	11.
-----	61.	-----	20.	-----	14.	-----
145.	-----	25.	-----	7.	-----	28.
-----	-12.	-----	-40.	-----	7.	-----
905.	-----	49.	-----	67.	-----	-4.
-----	185.	-----	-13.	-----	0.	-----
001.	-----	61.	-----	7.	-----	0.

MONITOR.

AFF- 76
JP-8(SHALE) VS JP-4(PET)
1981, MAY 7-8

DAY 1 (MAY 7)

0445: START FILL, WET:7.0, DRY:0.0, DEW PT.=6.5 DEGREES C, R.H.=36%
0600: END FILL
0629: 4.0 ML. NO2 INJECTED.
0631: 14.5 ML. NO INJECTED.
0634: MIX BAG.
0638: DIVIDE BAG.
0646: INJECTED 400 MICROLITERS OF JP-8(SHALE) INTO SIDE A, 2 MIN.
OF N2 ONLY, THEN HEAT FOR 30 MIN. AT 250 DEGREES C,
0703: INJECTED 370 MICROLITERS JP-4(PET) INTO SIDE B USING
OLD TECHNIQUE; HEAT GUN ON BULB FOR 15 MINUTES.
0720: MIX SIDE A AND SIDE B.
1620: END SAMPLING.
1635: COVER BAG.

DAY 2 (MAY 8)

0900: UNCOVER BAG.
1520: SAMPLING ENDED, RUN OVER.

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG.T(DEG.C)	31(+2)	32(+2)
AVG.UV(MW/CM2)	2.8(+1.0)	3.0(+0.6)

T=0 AT 900 PST

368 BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	29.1	5.9	DEG C
T	DORIC-1	29.0	5.1	DEG C
UV RAD	EPPLEY-2	2.91	0.82	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.292	PPM
NO	B-NOX-1	0.292	PPM
NO2-UNC	B-NOX-1	0.103	PPM
NO2-UNC	B-NOX-1	0.101	PPM
THC	BK6800-1	22.70	PPMC
THC	BK6800-1	24.50	PPMC

AFF- 76
JP-8(SHALE) VS JP-4(PET)
1981, MAY 7-8

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550E
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD

AFF- 76
JP-8(SHALE) VS JP-4(PET)
1981, MAY 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX F B-N
1 615	-165	0.000	0.000	0.011	0.011	0.003	0.003	0
1 835	-25	0.005 A	-----	0.292	-----	0.103	-----	0
1 845	-15	-----	0.007 A	-----	0.292	-----	0.101	-----
1 1005	65	0.014	-----	0.178	-----	0.188	-----	0
1 1015	75	-----	0.023	-----	0.107	-----	0.259	-----
1 1105	125	0.063	-----	0.048	-----	0.300	-----	0
1 1115	135	-----	0.144	-----	0.018	-----	0.320	-----
1 1205	185	0.237	-----	0.012	-----	0.280	-----	0
1 1215	195	-----	0.343	-----	0.012	-----	0.272	-----
1 1305	245	0.473	-----	0.010	-----	0.191	-----	0
1 1315	255	-----	0.557	-----	0.010	-----	0.208	-----
1 1405	305	0.609	-----	0.010	-----	0.131	-----	0
1 1415	315	-----	0.678	-----	0.011	-----	0.170	-----
1 1505	365	0.620	-----	0.011	-----	0.103	-----	0
1 1515	375	-----	0.719	-----	0.011	-----	0.140	-----
1 1605	425	0.602	-----	0.010	-----	0.092	-----	0
1 1615	435	-----	0.698	-----	0.011	-----	0.122	-----
<hr/>								
2 835	1415	0.431	-----	0.012	-----	0.047	-----	0
2 845	1425	-----	0.516	-----	0.013	-----	0.062	-----
2 1005	1505	0.406	-----	0.011	-----	0.050	-----	0
2 1015	1515	-----	0.489	-----	0.013	-----	0.070	-----
2 1105	1565	0.394	-----	0.011	-----	0.062	-----	0
2 1115	1575	-----	0.488	-----	0.012	-----	0.077	-----
2 1205	1625	0.401	-----	0.011	-----	0.068	-----	0
2 1215	1635	-----	0.495	-----	0.015	-----	0.078	-----
2 1305	1685	0.404	-----	0.015	-----	0.068	-----	0
2 1315	1695	-----	0.503	-----	0.018	-----	0.077	-----
2 1405	1745	0.419	-----	0.014	-----	0.067	-----	0
2 1415	1755	-----	0.504	-----	0.018	-----	0.077	-----
2 1505	1805	0.415	-----	0.013	-----	0.067	-----	0
2 1515	1815	-----	0.492	-----	0.013	-----	0.074	-----

----- NO DATA TAKEN

370

12 NOV 1981
PAGE 3

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6300-1	SIDE 1 THC PPMC BYRON
11	0.003	0.003	0.012	0.012	0.95	1.75
--	0.103	-----	0.400	-----	22.70	12.80
92	-----	0.101	-----	0.399	-----	-----
--	0.188	-----	0.377	-----	21.90	12.60
07	-----	0.259	-----	0.372	-----	-----
--	0.300	-----	0.343	-----	21.60	12.40
18	-----	0.320	-----	0.329	-----	-----
--	0.280	-----	0.283	-----	20.50	12.10
12	-----	0.272	-----	0.278	-----	-----
--	0.191	-----	0.195	-----	19.10	11.80
10	-----	0.208	-----	0.212	-----	-----
--	0.131	-----	0.137	-----	17.90	11.50
11	-----	0.170	-----	0.172	-----	-----
--	0.103	-----	0.110	-----	17.20	11.20
11	-----	0.140	-----	0.146	-----	-----
--	0.092	-----	0.099	-----	17.40	11.20
11	-----	0.122	-----	0.130	-----	-----
--	0.047	-----	0.053	-----	16.30	10.50
13	-----	0.062	-----	0.071	-----	-----
--	0.050	-----	0.060	-----	16.10	10.40
13	-----	0.070	-----	0.080	-----	-----
--	0.062	-----	0.070	-----	16.60	10.50
12	-----	0.077	-----	0.086	-----	-----
--	0.068	-----	0.073	-----	16.20	10.60
15	-----	0.078	-----	0.088	-----	-----
--	0.068	-----	0.077	-----	16.10	10.40
18	-----	0.077	-----	0.088	-----	-----
--	0.067	-----	0.076	-----	15.90	10.30
18	-----	0.077	-----	0.088	-----	-----
--	0.067	-----	0.074	-----	15.70	10.10
13	-----	0.074	-----	0.082	-----	-----

2

AFF- 76
 JP-8(SHALE) VS JP-4(PET)
 1981, MAY 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2 EPPLEY-2	SIDE 1	SIDE 2	SIDE 1	SIDE 1
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143	#PART/CC CLIMET	#FA
1 615	-165	14.2	14.2	-----	0.2	0.2	0.	
1 835	-25	21.3	-----	-----	32.0	-----	0.	
1 845	-15	-----	22.8	-----	-----	0.0	-----	
1 1005	65	27.0	-----	2.82	21.0	-----	0.	
1 1015	75	-----	29.4	3.73	-----	42.0	-----	
1 1105	125	29.5	-----	3.73	16.5	-----	0.	
1 1115	135	-----	30.3	3.73	-----	33.0	-----	
1 1205	185	33.3	-----	3.64	13.0	-----	10.	
1 1215	195	-----	33.0	3.55	-----	25.0	-----	
1 1305	245	34.0	-----	3.55	11.0	-----	299.	
1 1315	255	-----	32.0	3.46	-----	20.0	-----	
1 1405	305	33.3	-----	2.45	8.2	-----	418.	
1 1415	315	-----	31.1	2.36	-----	15.2	-----	
1 1505	365	31.2	-----	2.00	6.3	-----	429.	
1 1515	375	-----	29.3	1.87	-----	11.7	-----	19
1 1605	425	28.7	-----	1.18	5.0	-----	424.	
1 1615	435	-----	28.0	1.09	-----	9.0	-----	2
2 835	1415	20.9	-----	-----	0.0	-----	143.	
2 845	1425	-----	22.6	-----	-----	0.0	-----	
2 1005	1505	26.5	-----	3.12	1.5	-----	105.	
2 1015	1515	-----	29.5	3.64	-----	0.8	-----	11
2 1105	1565	30.3	-----	3.64	1.1	-----	97.	
2 1115	1575	-----	30.3	3.64	-----	0.7	-----	11
2 1205	1625	33.5	-----	3.55	0.7	-----	204.	
2 1215	1635	-----	33.0	3.46	-----	0.5	-----	11
2 1305	1685	34.3	-----	3.28	0.5	-----	270.	
2 1315	1695	-----	32.4	2.91	-----	0.3	-----	10
2 1405	1745	34.0	-----	2.54	0.3	-----	316.	
2 1415	1755	-----	33.0	2.63	-----	0.2	-----	2
2 1505	1805	33.8	-----	2.05	0.2	-----	316.	
2 1515	1815	-----	32.6	1.96	-----	0.1	-----	2

----- NO DATA TAKEN

371

12 NOV 1981
PAGE 4

DE 1 DENS 3/CC -143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.2	0.2	0.	0.	0.	0.	0.	0.
2.0	-----	0.	-----	0.	-----	0.	-----
-----	0.0	-----	1.	-----	0.	-----	0.
1.0	-----	0.	-----	0.	-----	0.	-----
-----	42.0	-----	1.	-----	0.	-----	0.
6.5	-----	0.	-----	0.	-----	0.	-----
-----	33.0	-----	1.	-----	0.	-----	0.
3.0	-----	10.	-----	0.	-----	0.	-----
-----	25.0	-----	1.	-----	0.	-----	0.
1.0	-----	299.	-----	39.	-----	0.	-----
-----	20.0	-----	5.	-----	0.	-----	0.
8.2	-----	418.	-----	193.	-----	8.	-----
-----	15.2	-----	90.	-----	0.	-----	0.
6.3	-----	429.	-----	233.	-----	18.	-----
-----	11.7	-----	185.	-----	5.	-----	0.
5.0	-----	424.	-----	228.	-----	18.	-----
-----	9.0	-----	214.	-----	11.	-----	0.
0.0	-----	143.	-----	15.	-----	0.	-----
-----	0.0	-----	89.	-----	3.	-----	0.
1.5	-----	105.	-----	45.	-----	0.	-----
-----	0.8	-----	153.	-----	13.	-----	0.
1.1	-----	97.	-----	50.	-----	0.	-----
-----	0.7	-----	129.	-----	13.	-----	0.
0.7	-----	204.	-----	51.	-----	1.	-----
-----	0.5	-----	121.	-----	20.	-----	0.
0.5	-----	270.	-----	75.	-----	1.	-----
-----	0.3	-----	160.	-----	30.	-----	0.
0.3	-----	316.	-----	91.	-----	2.	-----
-----	0.2	-----	204.	-----	37.	-----	0.
0.2	-----	316.	-----	81.	-----	2.	-----
-----	0.1	-----	223.	-----	40.	-----	0.

2

AFF- 76
JP-8(SHALE) VS JP-4(PET)
1981, MAY 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		BSCAT MRI-388	BSCAT MRI-388	AER.V UM3/CC	AER.V UM3/CC	PART/CC TSI-023	PART/CC TSI-023	AER.N TSI-023
1 615	-165	0.0	0.0	4.	4.	-3541.	-3541.	2
1 733	-87	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.2	-----	-6.	-----	1.2E 05	-----	27
1 845	-15	-----	0.2	-----	5.	-----	329.	---
1 1005	65	0.4	-----	4.	-----	1.0E 05	-----	44
1 1015	75	-----	0.4	-----	4.	-----	1.8E 05	---
1 1105	125	1.0	-----	9.	-----	8.5E 04	-----	76
1 1115	135	-----	0.8	-----	13.	-----	1.7E 05	---
1 1205	185	3.8	-----	13.	-----	7.2E 04	-----	107
1 1215	195	-----	1.5	-----	13.	-----	1.3E 05	---
1 1305	245	13.6	-----	22.	-----	6.8E 04	-----	135
1 1315	255	-----	2.5	-----	19.	-----	1.0E 05	---
1 1405	305	20.8	-----	20.	-----	6.2E 04	-----	135
1 1415	315	-----	3.8	-----	21.	-----	8.2E 04	---
1 1505	365	21.6	-----	28.	-----	4.8E 04	-----	123
1 1515	375	-----	4.0	-----	18.	-----	7.0E 04	---
1 1605	425	22.0	-----	16.	-----	4.1E 04	-----	96
1 1615	435	-----	4.1	-----	16.	-----	5.6E 04	---
2 735	1355	-----	-----	-----	-----	-----	-----	-----
2 835	1415	1.4	-----	2.	-----	745.	-----	48
2 845	1425	-----	0.8	-----	5.	-----	4950.	---
2 1005	1505	1.5	-----	4.	-----	8780.	-----	138
2 1015	1515	-----	1.0	-----	-8.	-----	4592.	---
2 1105	1565	2.2	-----	1.	-----	8337.	-----	149
2 1115	1575	-----	1.3	-----	4.	-----	5046.	---
2 1205	1625	3.0	-----	4.	-----	7484.	-----	194
2 1215	1635	-----	1.7	-----	-3.	-----	4468.	---
2 1305	1685	4.0	-----	5.	-----	6127.	-----	183
2 1315	1695	-----	1.5	-----	3.	-----	3851.	---
2 1405	1745	3.7	-----	3.	-----	5082.	-----	133
2 1415	1755	-----	2.0	-----	5.	-----	2481.	---
2 1505	1805	3.0	-----	4.	-----	3043.	-----	113
2 1515	1815	-----	1.3	-----	3.	-----	2701.	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 2 N-C4 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1
-3541.	-3541.	29.	29.	0.0009	-----	-----
-----	-----	-----	-----	-----	0.0002	-----
1.2E 05	-----	272.	-----	-----	-----	-----
-----	329.	-----	50.	0.0073	-----	0.0444
1.0E 05	-----	442.	-----	-----	-----	-----
-----	1.8E 05	-----	457.	-----	-----	-----
8.5E 04	-----	742.	-----	-----	-----	-----
-----	1.7E 05	-----	869.	-----	-----	-----
7.2E 04	-----	1078.	-----	-----	-----	-----
-----	1.3E 05	-----	1188.	-----	-----	-----
6.8E 04	-----	1359.	-----	-----	-----	-----
-----	1.0E 05	-----	1410.	-----	-----	-----
6.2E 04	-----	1356.	-----	-----	-----	-----
-----	8.2E 04	-----	1406.	-----	-----	-----
4.8E 04	-----	1234.	-----	-----	0.0004	-----
-----	7.0E 04	-----	1258.	-----	-----	-----
4.1E 04	-----	961.	-----	-----	-----	-----
-----	5.6E 04	-----	1047.	0.0068	-----	0.0406
-----	-----	-----	-----	-----	0.0006	-----
745.	-----	48.	-----	-----	-----	-----
-----	4950.	-----	92.	0.0071	-----	0.0402
8780.	-----	138.	-----	-----	-----	-----
-----	4592.	-----	-9.	-----	-----	-----
8337.	-----	149.	-----	-----	-----	-----
-----	5046.	-----	119.	-----	-----	-----
7484.	-----	194.	-----	-----	-----	-----
-----	4468.	-----	89.	-----	-----	-----
6127.	-----	183.	-----	-----	-----	-----
-----	3851.	-----	128.	-----	-----	-----
5082.	-----	133.	-----	-----	0.0008	-----
-----	2481.	-----	113.	-----	-----	-----
3043.	-----	113.	-----	-----	-----	-----
-----	2701.	-----	78.	0.0071	-----	0.0384

AFF- 76
JP-4 (SHALE) VS JP-4(PET)
1981, MAY 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 2		SIDE 2		SIDE 2		SIDE 2		SIDE 1	SII
		N-C6 PPM	VAR 3700	N-C7 PPM	VAR 3700	MECYC-C6 PPM	VAR 3700	N-C8 PPM	VAR 3700	N-C9 PPM	VAR
1 733	-87	-----	-----	-----	-----	-----	-----	-----	-----	0.1575	---
1 845	-15	0.1000	0.1244	0.0791	0.1098	0.0568	-----	-----	-----	0.0	0.0
1 1005	65	-----	-----	-----	-----	-----	-----	-----	-----	0.1488	---
1 1115	135	0.0959	0.1160	0.0697	0.1025	0.0534	-----	-----	-----	0.0	0.0
1 1205	185	-----	-----	-----	-----	-----	-----	-----	-----	0.1285	---
1 1315	255	0.0937	0.1124	0.0653	0.0980	0.0483	-----	-----	-----	0.0	0.0
1 1505	365	-----	-----	-----	-----	-----	-----	-----	-----	0.1182	---
1 1615	435	0.0923	0.1064	0.0622	0.0976	0.0452	-----	-----	-----	0.0	0.0
2 735	1355	-----	-----	-----	-----	-----	-----	-----	-----	0.1145	---
2 845	1425	0.1032	0.1127	0.0615	0.0933	0.0453	-----	-----	-----	0.0	0.0
2 1005	1505	-----	-----	-----	-----	-----	-----	-----	-----	0.1110	---
2 1115	1575	0.0918	0.1074	0.0610	0.0923	-----	-----	-----	-----	0.0	0.0
2 1205	1625	-----	-----	-----	-----	-----	-----	-----	-----	0.1116	---
2 1405	1745	-----	-----	-----	-----	-----	-----	-----	-----	0.1066	---
2 1515	1815	0.0886	0.0989	0.0547	0.0877	0.0392	-----	-----	-----	0.0	0.0

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	N-C9	N-C10	N-C10	N-C11	N-C11	N-C12	N-C12
	PPM						
	VAR 3700						
--	-----	0.1575	-----	0.1763	-----	0.1215	-----
198	0.0568	-----	0.0374	-----	0.0460	-----	0.0424
--	-----	0.1488	-----	0.1695	-----	0.1137	-----
25	0.0534	-----	0.0345	-----	0.0447	-----	0.0387
--	-----	0.1285	-----	0.1538	-----	0.1018	-----
80	0.0483	-----	0.0330	-----	0.0418	-----	0.0371
--	-----	0.1182	-----	0.1388	-----	0.0924	-----
76	0.0452	-----	0.0317	-----	0.0392	-----	0.0351
--	-----	0.1145	-----	0.1354	-----	0.0825	-----
33	0.0453	-----	0.0295	-----	0.0392	-----	0.0310
--	-----	0.1110	-----	0.1301	-----	0.0819	-----
27	-----	-----	0.0292	-----	0.0375	-----	0.0315
--	-----	0.1116	-----	0.1310	-----	0.0838	-----
--	-----	0.1066	-----	0.1269	-----	0.0800	-----
77	0.0392	-----	0.0292	-----	0.0374	-----	0.0372

2

AFF- 76
 JP-8(SHALE) VS JP-4(PET)
 1981, MAY 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 2	SIDE 2	SIDE 2	SI
		N-C13 PPM VAR 3700	N-C13 PPM VAR 3700	N-C14 PPM VAR 3700	N-C14 PPM VAR 3700	O-XYL PPM VAR 3700	M-XYL PPM VAR 3700	C2 P	
1 733	-87	0.0614	-----	0.024	-----	-----	-----	-----	--
1 845	-15	-----	0.0323	-----	0.019	0.0170	0.0772	0.	
1 1005	65	0.0559	-----	0.022	-----	-----	-----	-----	
1 1115	135	-----	0.0046	-----	0.016	0.0155	0.0681	0.	
1 1205	185	0.0488	-----	0.019	-----	-----	-----	-----	
1 1315	255	-----	0.0272	-----	0.014	0.0147	0.0628	0.	
1 1505	365	0.0458	-----	0.020	-----	-----	-----	-----	
1 1615	435	-----	0.0249	-----	0.014	0.0137	0.0586	0.	
2 735	1355	0.0428	-----	0.030	-----	-----	-----	-----	
2 845	1425	-----	0.0249	-----	0.016	0.0157	0.0602	0.	
2 1005	1505	0.0371	-----	0.017	-----	-----	-----	-----	
2 1115	1575	-----	0.0227	-----	0.013	-----	0.0569	0.	
2 1205	1625	0.0418	-----	0.017	-----	-----	-----	-----	
2 1405	1745	0.0398	-----	0.018	-----	-----	-----	-----	
2 1515	1815	-----	0.0209	-----	0.013	0.0118	0.0496	0.	

----- NO DATA TAKEN

12 NOV 1981

PAGE 7

E 2 14 M 3700	SIDE 2 O-XYL PPM VAR 3700	SIDE 2 M-XYL PPM VAR 3700	SIDE 2 C2BENZ PPM VAR 3700	SIDE 2 I-C3-BZ PPM VAR 3700	SIDE 2 N-C3-BZ PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 2 124TMEBZ PPM VAR 3700
---	-----	-----	-----	-----	-----	0.0305	-----
019	0.0170	0.0772	0.0238	0.0035	0.0040	-----	0.0247
---	-----	-----	-----	-----	-----	0.0276	-----
016	0.0155	0.0681	0.0150	0.0034	0.0038	-----	0.0198
---	-----	-----	-----	-----	-----	0.0230	-----
014	0.0147	0.0628	0.0063	0.0036	0.0038	-----	0.0160
---	-----	-----	-----	-----	-----	0.0188	-----
014	0.0137	0.0586	0.0202	0.0030	0.0036	-----	0.0136
---	-----	-----	-----	-----	-----	0.0202	-----
016	0.0157	0.0602	0.0204	0.0039	0.0043	-----	0.0138
---	-----	-----	-----	-----	-----	0.0170	-----
013	-----	0.0569	0.0199	-----	-----	-----	0.0117
---	-----	-----	-----	-----	-----	0.0158	-----
---	-----	-----	-----	-----	-----	0.0145	-----
013	0.0118	0.0496	0.0183	0.0028	0.0032	-----	0.0096

3

AFF- 76
 JP-8(SHALE) VS JP-4(PET)
 1981, MAY 7-8

			SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
CLOCK	ELAPSED	CO	CO	PAN	PAN	PAN	PART.024	PART.024	PART
TIME	TIME	PPM	PPM	PPM	PPM	PPM	PART/CC	PART/CC	PART
DY	HR.	(MIN)	BK6800-1	BK6800-1	ECD-3	ECD-3	TSI-023	TSI-023	TSI-
1	615	-165	1.05	1.05	0.000	0.000	-4008,	-4008,	52
1	835	-25	1.06	-----	0.000	-----	1.0E 05	-----	1.5
1	845	-15	-----	1.03	-----	0.000	-----	668,	---
1	1005	65	1.07	-----	0.002	-----	6.0E 04	-----	3.1
1	1015	75	-----	1.07	-----	0.005	-----	1.6E 05	---
1	1105	125	1.06	-----	0.008	-----	1.7E 04	-----	4.3
1	1115	135	-----	1.10	-----	0.018	-----	9.0E 04	---
1	1205	185	1.11	-----	0.024	-----	3006,	-----	1.7
1	1215	195	-----	1.14	-----	0.035	-----	2.1E 04	---
1	1305	245	1.08	-----	0.059	-----	334,	-----	243
1	1315	255	-----	1.19	-----	0.067	-----	5344,	---
1	1405	305	1.15	-----	0.105	-----	668,	-----	-52
1	1415	315	-----	1.23	-----	0.100	-----	668,	---
1	1505	365	1.20	-----	0.120	-----	-1670,	-----	-95
1	1515	375	-----	1.18	-----	0.144	-----	-501,	---
1	1605	425	1.25	-----	0.136	-----	334,	-----	-8
1	1615	435	-----	1.26	-----	0.145	-----	2338,	---
375	2	835	1415	1.27	-----	-----	-334,	-----	8
	2	845	1425	-----	1.27	-----	0.041	-----	3173,
	2	1005	1505	1.27	-----	0.043	-----	334,	-----
	2	1015	1515	-----	1.24	-----	0.056	-----	501,
	2	1105	1565	1.35	-----	0.057	-----	-334,	-----
	2	1115	1575	-----	1.32	-----	0.056	-----	-167,
	2	1205	1625	1.41	-----	0.057	-----	0,	-----
	2	1215	1635	-----	1.38	-----	0.061	-----	-835,
	2	1305	1685	1.40	-----	0.052	-----	0,	-----
	2	1315	1695	-----	1.47	-----	0.045	-----	-334,
	2	1405	1745	1.45	-----	0.050	-----	1002,	-----
	2	1415	1755	-----	1.60	-----	0.046	-----	-1169,
	2	1505	1805	1.50	-----	0.047	-----	167,	-----
	2	1515	1815	-----	1.47	-----	0.039	-----	167,

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
2	PART,024	PART,024	PART,042	PART,042	PART,075	PART,075
	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
-3	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
000	-4008.	-4008.	522.	522.	-89.	-89.
---	1.0E 05	-----	1.5E 04	-----	2620.	-----
000	-----	668.	-----	-174.	-----	133.
---	6.0E 04	-----	3.1E 04	-----	8081.	-----
005	-----	1.6E 05	-----	1.8E 04	-----	2797.
---	1.7E 04	-----	4.3E 04	-----	2.5E 04	-----
018	-----	9.0E 04	-----	6.6E 04	-----	1.6E 04
---	3006.	-----	1.7E 04	-----	5.0E 04	-----
035	-----	2.1E 04	-----	6.7E 04	-----	4.1E 04
---	334.	-----	2436.	-----	6.1E 04	-----
067	-----	5344.	-----	3.4E 04	-----	6.3E 04
---	668.	-----	-522.	-----	5.5E 04	-----
100	-----	-668.	-----	1.4E 04	-----	6.6E 04
---	-1670.	-----	-957.	-----	4.3E 04	-----
144	-----	-501.	-----	9396.	-----	5.8E 04
---	334.	-----	-87.	-----	3.4E 04	-----
145	-----	2338.	-----	3045.	-----	4.3E 04
---	-334.	-----	87.	-----	622.	-----
041	-----	3173.	-----	348.	-----	932.
---	334.	-----	3654.	-----	4573.	-----
056	-----	501.	-----	2088.	-----	1820.
---	-334.	-----	870.	-----	7237.	-----
056	-----	-167.	-----	1305.	-----	3641.
---	0.	-----	261.	-----	6038.	-----
061	-----	-835.	-----	957.	-----	3774.
---	0.	-----	174.	-----	4618.	-----
045	-----	-334.	-----	696.	-----	2664.
---	1002.	-----	87.	-----	2797.	-----
046	-----	-1169.	-----	87.	-----	2886.
---	167.	-----	-261.	-----	1998.	-----
039	-----	167.	-----	0.	-----	1865.

2

AFF- 76

JP-8(SHALE) VS JP-4(PET)
1981, MAY 7-8

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.75 PART/CC TSI-023
1 615	-165	96.	96.	-123.	-123.	47.	47.	14.	14.
1 835	-25	121.	-----	49.	-----	60.	-----	-49.	-----
1 845	-15	-----	-578.	-----	246.	-----	20.	-----	14.
1 1005	65	386.	-----	-111.	-----	27.	-----	0.	-----
1 1015	75	-----	143.	-----	12.	-----	20.	-----	0.
1 1105	125	675.	-----	0.	-----	33.	-----	0.	-----
1 1115	135	-----	482.	-----	-12.	-----	-60.	-----	39.
1 1205	185	1663.	-----	37.	-----	0.	-----	-4.	-----
1 1215	195	-----	819.	-----	111.	-----	-33.	-----	4.
1 1305	245	4145.	-----	86.	-----	20.	-----	7.	-----
1 1315	255	-----	1663.	-----	-62.	-----	20.	-----	7.
1 1405	305	6965.	-----	98.	-----	-33.	-----	0.	-----
1 1415	315	-----	2241.	-----	-148.	-----	107.	-----	0.
1 1505	365	6820.	-----	148.	-----	7.	-----	39.	-----
1 1515	375	-----	2699.	-----	37.	-----	20.	-----	4.
1 1605	425	6170.	-----	62.	-----	20.	-----	-4.	-----
1 1615	435	-----	2868.	-----	-12.	-----	7.	-----	7.
2 835	1415	337.	-----	0.	-----	33.	-----	0.	-----
2 845	1425	-----	386.	-----	74.	-----	27.	-----	11.
2 1005	1505	120.	-----	111.	-----	-27.	-----	14.	-----
2 1015	1515	-----	217.	-----	-12.	-----	20.	-----	-42.
2 1105	1565	554.	-----	49.	-----	-40.	-----	0.	-----
2 1115	1575	-----	145.	-----	86.	-----	33.	-----	4.
2 1205	1625	1060.	-----	111.	-----	13.	-----	0.	-----
2 1215	1635	-----	458.	-----	86.	-----	60.	-----	-32.
2 1305	1685	1253.	-----	62.	-----	13.	-----	7.	-----
2 1315	1695	-----	651.	-----	148.	-----	27.	-----	0.
2 1405	1745	1157.	-----	12.	-----	27.	-----	0.	-----
2 1415	1755	-----	651.	-----	12.	-----	0.	-----	14.
2 1505	1805	1133.	-----	12.	-----	-20.	-----	14.	-----
2 1515	1815	-----	699.	-----	-37.	-----	0.	-----	7.

----- NO DATA TAKEN

NOTES

A PROBABLE INTERFERENCE BY FUEL COMPONENTS ON OZONE MONITOR.

AFF- 77
JP-4 (PET) VS JP-8 (SHALE)
1981, MAY 12-13

DAY 1 (MAY 12)

0445: START FILL. WET: 7.0 PSIG; DRY: 0.0 PSIG. DEW PT: 7.0C. RH: 38%
0627: INJECTED 4.0 ML NO₂
0629: INJECTED 14.5 ML NO
0635: DIVIDE BAG
0644: INJECTED 400 MICROLITERS JP-8(SHALE) INTO SIDE B.
0701: INJECTED 370 MICROLITERS JP-4(PET) INTO SIDE A.
0900: UNCOVER BAG (T=0)
1620: SAMPLING ENDED FOR DAY
1630: BAG COVERED

DAY 2 (MAY 13)

0900: UNCOVERED BAG
1520: SAMPLING ENDED; RUN OVER.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	30(+/-2)	30(+/-2)
AVG.UV(MW/CM2)	3.0(+/-1.0)	3.3(+/-0.7)

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	27.9	5.2	DEG C
T	DORIC-1	27.8	4.3	DEG C
UV RAD	EPPELEY-2	3.16	0.88	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.309	PPM
NO	B-NOX-1	0.309	PPM
NO ₂ -UNC	B-NOX-1	0.102	PPM
NO ₂ -UNC	B-NOX-1	0.102	PPM
THC	BK6800-1	23.30	PPMC
THC	BK6800-1	24.80	PPMC

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN:300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
4131	EPPELEY-2	EPPELEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD

AFF- 77
 JP-4 (PET) VS JP-8 (SHALE)
 1981, MAY 12-13

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX- PP B-NO
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 835	-25	0.009 A	-----	0.309	-----	0.102	-----	0.
1 845	-15	-----	0.001 A	-----	0.309	-----	0.102	0.
1 1005	65	0.022	-----	0.162	-----	0.226	-----	0.
1 1015	75	-----	0.020	-----	0.140	-----	0.243	---
1 1105	125	0.080	-----	0.033	-----	0.340	-----	0.
1 1115	135	-----	0.107	-----	0.018	-----	0.332	---
1 1205	185	0.240	-----	0.007	-----	0.320	-----	0.
1 1215	195	-----	0.331	-----	0.003	-----	0.266	---
1 1305	245	0.445	-----	0.003	-----	0.267	-----	0.
1 1315	255	-----	0.560	-----	0.003	-----	0.178	---
1 1405	305	0.634	-----	0.004	-----	0.209	-----	0.
1 1415	315	-----	0.654	-----	0.007	-----	0.126	---
1 1505	365	0.725	-----	0.003	-----	0.169	-----	0.
1 1515	375	-----	0.639	-----	0.008	-----	0.110	---
1 1605	425	0.750	-----	0.003	-----	0.142	-----	0.
1 1615	435	-----	0.614	-----	0.006	-----	0.106	---
2 835	1415	0.539	-----	0.007	-----	0.062	-----	0.
2 845	1425	-----	0.449	-----	0.007	-----	0.048	---
2 1005	1505	0.515	-----	0.008	-----	0.070	-----	0.
2 1015	1515	-----	0.428	-----	0.006	-----	0.059	---
2 1105	1565	0.505	-----	0.005	-----	0.080	-----	0.
2 1115	1575	-----	0.410	-----	0.009	-----	0.064	---
2 1205	1625	0.500	-----	0.009	-----	0.083	-----	0.
2 1215	1635	-----	0.405	-----	0.009	-----	0.069	---
2 1305	1685	0.506	-----	0.009	-----	0.088	-----	0.
2 1315	1695	-----	0.407	-----	0.009	-----	0.069	---
2 1405	1745	0.513	-----	0.009	-----	0.087	-----	0.
2 1415	1755	-----	0.399	-----	0.009	-----	0.070	---
2 1505	1805	0.512	-----	0.009	-----	0.083	-----	0.
2 1515	1815	-----	0.399	-----	0.009	-----	0.070	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

2	SIDE 1 NO2-UNC PPM -1 B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
00	0.000	0.000	0.000	0.000	0.70	0.70
--	0.102	-----	0.419	-----	23.30	-----
09	-----	0.102	-----	0.420	-----	24.80
--	0.226	-----	0.406	-----	22.70	-----
40	-----	0.243	-----	0.397	-----	24.00
--	0.340	-----	0.369	-----	22.40	-----
18	-----	0.332	-----	0.342	-----	23.20
--	0.320	-----	0.320	-----	21.40	-----
03	-----	0.266	-----	0.263	-----	22.00
--	0.267	-----	0.262	-----	20.40	-----
03	-----	0.178	-----	0.180	-----	20.60
--	0.209	-----	0.209	-----	19.50	-----
07	-----	0.126	-----	0.129	-----	19.60
--	0.169	-----	0.170	-----	19.00	-----
08	-----	0.110	-----	0.112	-----	19.10
--	0.142	-----	0.142	-----	18.90	-----
06	-----	0.106	-----	0.109	-----	19.10
--	0.062	-----	0.068	-----	17.80	-----
07	-----	0.048	-----	0.050	-----	18.60
--	0.070	-----	0.074	-----	18.30	-----
06	-----	0.059	-----	0.062	-----	18.40
--	0.080	-----	0.082	-----	18.00	-----
09	-----	0.064	-----	0.070	-----	18.40
--	0.083	-----	0.089	-----	17.80	-----
09	-----	0.069	-----	0.072	-----	18.00
--	0.088	-----	0.091	-----	17.60	-----
09	-----	0.069	-----	0.072	-----	17.70
--	0.087	-----	0.090	-----	17.40	-----
09	-----	0.070	-----	0.077	-----	17.60
--	0.083	-----	0.090	-----	17.30	-----
09	-----	0.070	-----	0.074	-----	17.70

2

AFF- 77
 JP-4 (PET) VS JP-8 (SHALE)
 1981, MAY 12-13

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE
		T DEG C DORIC-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143	*PART/CC CLIMET	PART CLIMET	PART CLIMET	*PART CLIMET	PART CLIMET	
1 605	-175	16.0	16.0	-----	0.0	0.0	0.	-----	0.	0.	0.	
1 835	-25	21.4	-----	-----	1.0	-----	0.	-----	0.	0.	0.	
1 845	-15	-----	22.8	-----	-----	31.0	-----	-----	-----	-----	-----	
1 1005	65	24.8	-----	2.82	51.0	-----	0.	-----	0.	0.	0.	
1 1015	75	-----	28.0	3.64	-----	20.0	-----	-----	-----	-----	-----	
1 1105	125	28.5	-----	4.14	34.0	-----	0.	-----	0.	0.	0.	
1 1115	135	-----	29.6	4.09	-----	16.0	-----	-----	-----	-----	-----	
1 1205	185	31.8	-----	3.91	26.0	-----	0.	-----	0.	0.	0.	
1 1215	195	-----	30.6	3.87	-----	13.0	-----	-----	-----	-----	5	
1 1305	245	33.1	-----	3.73	19.0	-----	0.	-----	0.	0.	0.	
1 1315	255	-----	30.7	3.64	-----	10.0	-----	-----	-----	-----	35	
1 1405	305	31.9	-----	2.73	15.0	-----	33.	-----	-----	-----	33.	
1 1415	315	-----	31.0	2.63	-----	8.2	-----	-----	-----	-----	42	
1 1505	365	31.5	-----	2.18	11.3	-----	157.	-----	-----	-----	157.	
1 1515	375	-----	29.6	2.09	-----	7.0	-----	-----	-----	-----	42	
1 1605	425	27.5	-----	1.37	8.4	-----	215.	-----	-----	-----	215.	
1 1615	435	-----	27.3	1.28	-----	5.0	-----	-----	-----	-----	42	
2 835	1415	19.5	-----	-----	0.0	-----	95.	-----	-----	-----	95.	
2 845	1425	-----	20.6	-----	-----	0.0	-----	-----	-----	-----	24	
2 1005	1505	24.7	-----	2.82	1.2	-----	147.	-----	-----	-----	147.	
2 1015	1515	-----	27.0	3.55	-----	0.1	-----	-----	-----	-----	20	
2 1105	1565	28.5	-----	4.09	0.9	-----	121.	-----	-----	-----	121.	
2 1115	1575	-----	29.0	4.14	-----	0.0	-----	-----	-----	-----	17	
2 1205	1625	30.5	-----	4.05	0.7	-----	95.	-----	-----	-----	95.	
2 1215	1635	-----	30.5	3.84	-----	0.0	-----	-----	-----	-----	20	
2 1305	1685	33.0	-----	3.73	0.4	-----	101.	-----	-----	-----	101.	
2 1315	1695	-----	30.0	3.64	-----	0.1	-----	-----	-----	-----	22	
2 1405	1745	32.0	-----	3.05	0.2	-----	138.	-----	-----	-----	138.	
2 1415	1755	-----	31.3	2.96	-----	0.0	-----	-----	-----	-----	21	
2 1505	1805	31.2	-----	2.18	0.2	-----	162.	-----	-----	-----	162.	
2 1515	1815	-----	30.5	2.05	-----	0.1	-----	-----	-----	-----	18	

----- NO DATA TAKEN

379

12 NOV 1981
PAGE 3

	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0	0.0	0.	0.	0.	0.	0.	0.
0	-----	0.	-----	0.	-----	0.	-----
-	31.0	-----	0.	-----	0.	-----	0.
0	-----	0.	-----	0.	-----	0.	-----
-	20.0	-----	0.	-----	0.	-----	0.
0	-----	0.	-----	0.	-----	0.	-----
-	16.0	-----	0.	-----	0.	-----	0.
0	-----	0.	-----	0.	-----	0.	-----
-	13.0	-----	56.	-----	0.	-----	0.
0	-----	0.	-----	0.	-----	0.	-----
-	10.0	-----	359.	-----	90.	-----	0.
0	-----	33.	-----	0.	-----	0.	-----
-	8.2	-----	424.	-----	210.	-----	11.
3	-----	157.	-----	3.	-----	0.	-----
-	7.0	-----	428.	-----	229.	-----	17.
4	-----	215.	-----	11.	-----	0.	-----
-	5.0	-----	420.	-----	222.	-----	16.
0	-----	95.	-----	3.	-----	0.	-----
0	0.0	-----	245.	-----	39.	-----	0.
2	-----	147.	-----	11.	-----	0.	-----
-	0.1	-----	203.	-----	59.	-----	1.
9	-----	121.	-----	9.	-----	0.	-----
-	0.0	-----	172.	-----	105.	-----	2.
7	-----	95.	-----	9.	-----	0.	-----
-	0.0	-----	204.	-----	117.	-----	3.
4	-----	101.	-----	14.	-----	0.	-----
-	0.1	-----	221.	-----	106.	-----	4.
3	-----	138.	-----	18.	-----	0.	-----
-	0.0	-----	211.	-----	90.	-----	4.
8	-----	162.	-----	19.	-----	0.	-----
-	0.1	-----	162.	-----	78.	-----	4.

2

AFF- 77
 JP-4 (PET) VS JP-8 (SHALE)
 1981, MAY 12-13

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		BSCAT 10-4 M-1 MRI-388	ISCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.N PART/CC TSI-023	AER. UM2/ TSI-0
1 605	-175	0.2	0.2	9.	9.	-2387.	-2387.	64
1 725	95	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.1	-----	1.	-----	250.	-----	9
1 845	-15	-----	0.2	-----	1.	-----	1.1E 05	-----
1 1005	65	0.2	-----	4.	-----	1.9E 05	-----	431
1 1015	75	-----	0.2	-----	6.	-----	1.1E 05	-----
1 1105	125	0.3	-----	10.	-----	1.9E 05	-----	803
1 1115	135	-----	0.9	-----	11.	-----	9.1E 04	-----
1 1205	185	1.0	-----	13.	-----	1.4E 05	-----	1101
1 1215	195	-----	4.4	-----	21.	-----	7.6E 04	-----
1 1305	245	2.2	-----	17.	-----	1.1E 05	-----	1347
1 1315	255	-----	9.0	-----	22.	-----	7.9E 04	-----
1 1405	305	4.0	-----	21.	-----	8.9E 04	-----	1431
1 1415	315	-----	11.6	-----	28.	-----	7.1E 04	-----
1 1505	365	6.2	-----	20.	-----	6.9E 04	-----	1320
1 1515	375	-----	12.8	-----	24.	-----	5.8E 04	-----
1 1605	425	8.0	-----	18.	-----	5.6E 04	-----	1099
1 1615	435	-----	12.8	-----	12.	-----	4.7E 04	-----
2 715	1335	-----	-----	-----	-----	-----	-----	-----
2 835	1415	1.2	-----	5.	-----	487.	-----	69
2 845	1425	-----	1.5	-----	3.	-----	2766.	-----
2 1005	1505	1.3	-----	0.	-----	5892.	-----	71
2 1015	1515	-----	2.0	-----	5.	-----	2122.	-----
2 1105	1565	1.3	-----	3.	-----	6501.	-----	115
2 1115	1575	-----	1.8	-----	2.	-----	2786.	-----
2 1205	1625	1.8	-----	2.	-----	5569.	-----	121
2 1215	1635	-----	2.0	-----	1.	-----	3245.	-----
2 1305	1685	1.9	-----	-1.	-----	4390.	-----	86
2 1315	1695	-----	2.1	-----	4.	-----	3062.	-----
2 1405	1745	2.2	-----	-2.	-----	3846.	-----	74
2 1415	1755	-----	1.8	-----	2.	-----	1306.	-----
2 1505	1805	2.0	-----	-1.	-----	3103.	-----	58
2 1515	1815	-----	1.7	-----	3.	-----	1705.	-----

----- NO DATA TAKEN

380

12 NOV 1981
PAGE 4

DE 1 R.N T/CC -023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM VAR 3700
87.	-2387.	64.	64.	-----	-----	-----
-----	-----	-----	-----	0.0432	-----	0.1025
50.	-----	9.	-----	-----	-----	-----
-----	1.1E 05	-----	262.	-----	-----	-----
9E 05	-----	431.	-----	-----	-----	0.0974
-----	1.1E 05	-----	571.	-----	-----	-----
9E 05	-----	803.	-----	-----	-----	-----
-----	9.1E 04	-----	941.	-----	-----	-----
4E 05	-----	1101.	-----	-----	-----	0.0961
-----	7.6E 04	-----	1314.	-----	-----	-----
1E 05	-----	1347.	-----	-----	-----	-----
-----	7.9E 04	-----	1504.	-----	-----	-----
9E 04	-----	1431.	-----	-----	-----	-----
-----	7.1E 04	-----	1531.	-----	-----	-----
9E 04	-----	1320.	-----	0.0401	-----	0.0966
-----	5.8E 04	-----	1316.	-----	-----	-----
6E 04	-----	1099.	-----	-----	-----	-----
-----	4.7E 04	-----	1028.	-----	0.0003	-----
-----	-----	-----	-----	0.0381	-----	0.0856
487.	-----	69.	-----	-----	-----	-----
-----	2766.	-----	92.	-----	0.0005	-----
382.	-----	71.	-----	-----	-----	0.0931
-----	2122.	-----	87.	-----	-----	-----
501.	-----	115.	-----	-----	-----	-----
-----	2786.	-----	75.	-----	-----	-----
569.	-----	121.	-----	-----	-----	0.0966
-----	3245.	-----	75.	-----	-----	-----
390.	-----	86.	-----	-----	-----	-----
-----	3062.	-----	89.	-----	-----	-----
346.	-----	74.	-----	0.0386	-----	0.0864
-----	1306.	-----	73.	-----	-----	-----
103.	-----	58.	-----	-----	-----	-----
-----	1705.	-----	93.	-----	0.0007	-----

2

AFF- 77
JP-4 (PET) VS JP-8 (SHALE)
1981, MAY 12-13

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 1		SIDE 1		SIDE 1		SIDE 2		SIDE
		N-C7 PPM VAR 3700	MECYC-C6 PPM VAR 3700	N-C8 PPM VAR 3700	N-C9 PPM VAR 3700	N-C10 PPM VAR 3700	N-C10 PPM VAR 3700	N-C1 PPM VAR 3700	N-C1 PPM VAR 3700	N-C10 PPM VAR 3700	N-C1 PPM VAR 3700	N-C1 PPM VAR 3700
1 725	-95	0.1253	0.0759	0.1109	0.0630	0.0369	-----	-----	-----	0.04	-----	0.04
1 845	-15	-----	-----	-----	-----	-----	-----	-----	-----	0.1639	-----	-----
1 1005	65	0.1212	0.0723	0.1134	0.0558	0.0364	-----	-----	-----	-----	0.04	-----
1 1115	135	-----	-----	-----	-----	-----	-----	-----	-----	0.1541	-----	-----
1 1205	185	0.1230	0.0708	0.1075	0.0510	0.0347	-----	-----	-----	-----	0.04	-----
1 1315	255	-----	-----	-----	-----	-----	-----	-----	-----	0.1329	-----	-----
1 1505	365	0.1177	0.0649	0.0906	0.0464	0.0305	-----	-----	-----	-----	0.04	-----
2 715	1335	0.1069	0.0583	0.0856	0.0957	0.0281	-----	-----	-----	-----	0.04	-----
2 845	1425	-----	-----	-----	-----	-----	-----	-----	-----	0.1257	-----	-----
2 1005	1505	0.1089	0.0600	0.0923	0.0434	0.0281	-----	-----	-----	-----	0.04	-----
2 1115	1575	-----	-----	-----	-----	-----	-----	-----	-----	0.1239	-----	-----
2 1205	1625	0.1136	0.0608	0.0895	0.0438	0.0277	-----	-----	-----	-----	0.04	-----
2 1315	1695	-----	-----	-----	-----	-----	-----	-----	-----	0.1176	-----	-----
2 1405	1745	0.1104	0.0578	0.0861	0.0427	0.0269	-----	-----	-----	-----	0.04	-----
2 1515	1815	-----	-----	-----	-----	-----	-----	-----	-----	0.1173	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700	SIDE 1 N-C11 PPM VAR 3700	SIDE 2 N-C11 PPM VAR 3700	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700
1	0.0369	-----	0.0470	-----	0.0284	-----
2	-----	0.1639	-----	0.1793	-----	0.1262
30	0.0364	-----	0.0447	-----	0.0438	-----
58	-----	0.1541	-----	0.1697	-----	0.1090
10	0.0347	-----	0.0432	-----	0.0394	-----
64	-----	0.1329	-----	0.1533	-----	0.0946
57	0.0305	-----	0.0367	-----	0.0340	-----
34	0.0281	-----	0.0321	-----	0.0311	-----
38	-----	0.1257	-----	0.1398	-----	0.0831
427	0.0281	-----	0.0369	-----	0.0327	-----
34	-----	0.1239	-----	0.1417	-----	0.0829
38	0.0277	-----	0.0336	-----	0.0280	-----
427	-----	0.1176	-----	0.1323	-----	0.0757
34	0.0269	-----	0.0328	-----	0.0274	-----
427	-----	0.1173	-----	0.1327	-----	0.0781

2

AFF- 77
JP-4 (PET) VS JP-8 (SHALE)
1981, MAY 12-13

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C13 VAR 3700	SIDE 2 N-C13 VAR 3700	SIDE 1 N-C14 VAR 3700	SIDE 2 N-C14 VAR 3700	SIDE 1 O-XYL VAR 3700	SIDE 1 M-XYL VAR 3700	SIDE 1 C28I VAR 3700
		PPM	PPM	PPM	PPM	PPM	PPM	PPM
1 725	-95	0.0509	-----	0.026	-----	0.0215	0.0919	0.0
1 845	-15	-----	0.0558	-----	0.040	-----	-----	-----
1 1005	65	0.0285	-----	0.017	-----	0.0164	0.0742	0.0
1 1115	135	-----	0.0523	-----	0.021	-----	-----	-----
1 1205	185	0.0291	-----	0.015	-----	0.0147	0.0679	0.0
1 1315	255	-----	0.0430	-----	0.016	-----	-----	-----
1 1505	365	0.0249	-----	0.015	-----	0.0124	0.0594	0.0
2 715	1335	0.0274	-----	0.027	-----	0.0162	0.0596	0.0
2 845	1425	-----	0.0378	-----	0.016	-----	-----	-----
2 1005	1505	0.0218	-----	0.014	-----	0.0131	0.0566	0.0
2 1115	1575	-----	0.0376	-----	0.016	-----	-----	-----
2 1205	1625	0.0199	-----	0.013	-----	0.0143	0.0558	0.0
2 1315	1695	-----	0.0338	-----	0.015	-----	-----	-----
2 1405	1745	0.0192	-----	0.013	-----	0.0143	0.0537	0.0
2 1515	1815	-----	0.0369	-----	0.016	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

DE 2 C14 PM 3700	SIDE 1 O-XYL PPM VAR 3700	SIDE 1 M-XYL PPM VAR 3700	SIDE 1 C2BENZ PPM VAR 3700	SIDE 1 I-C3-BZ PPM VAR 3700	SIDE 1 N-C3-BZ PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 2 124TMEBZ PPM VAR 3700
-----	0.0215	0.0919	0.0248	0.0028	0.0059	0.0329	-----
.040	-----	-----	-----	-----	-----	-----	0.0350
-----	0.0164	0.0742	0.0234	0.0031	0.0038	0.0103	-----
.021	-----	-----	-----	-----	-----	-----	0.0285
-----	0.0147	0.0679	0.0146	0.0035	0.0036	0.0200	-----
.016	-----	-----	-----	-----	-----	-----	0.0228
-----	0.0124	0.0594	0.0203	0.0035	0.0034	0.0143	-----
-----	0.0162	0.0596	0.0196	0.0072	0.0052	0.0158	-----
.016	-----	-----	-----	-----	-----	-----	0.0197
-----	0.0131	0.0566	0.0199	0.0032	0.0037	0.0130	-----
.016	-----	-----	-----	-----	-----	-----	0.0177
-----	0.0143	0.0558	0.0138	0.0035	0.0042	0.0109	-----
.015	-----	-----	-----	-----	-----	-----	0.0159
-----	0.0143	0.0537	0.0214	0.0034	0.0042	0.0102	-----
.016	-----	-----	-----	-----	-----	-----	0.0154

2

AFF- 77
 JP-4 (PET) VS JP-8 (SHALE)
 1981, MAY 12-13

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SID PART
		CO PPM	BK6800-1	CO PPM	BK6800-1	PAN PPM	ECD-3	PAN PPM	ECD-3	HCHO PPM	CA	HCHO PPM	CA	TSI-
1 605	-175	0.47		0.47		0.000		0.000		-----		-----		-283
1 810	-50	-----		-----		-----		-----		0.005		0.000		---
1 835	-25	0.49		-----		0.000		-----		-----		-----		16
1 845	-15	-----		0.49		-----		0.000		-----		-----		---
1 1005	65	0.50		-----		0.004		-----		-----		-----		1.8
1 1015	75	-----		0.46		-----		0.006		-----		-----		---
1 1105	125	0.51		-----		0.015		-----		-----		-----		1.2
1 1115	135	-----		0.52		-----		0.023		-----		-----		---
1 1200	180	-----		-----		-----		-----		0.019		0.020		---
1 1205	185	0.51		-----		0.035		-----		-----		-----		3.9
1 1215	195	-----		0.55		-----		0.047		-----		-----		---
1 1305	245	0.58		-----		0.052		-----		-----		-----		801
1 1315	255	-----		1.23		-----		0.103		-----		-----		---
1 1405	305	0.60		-----		0.100		-----		-----		-----		283
1 1415	315	-----		0.62		-----		0.120		-----		-----		---
1 1505	365	0.63		-----		0.123		-----		-----		-----		-100
1 1515	375	-----		0.65		-----		0.154		-----		-----		---
1 1605	425	0.67		-----		0.148		-----		-----		-----		-33
1 1610	430	-----		-----		-----		-----		0.068		0.072		---
1 1615	435	-----		0.69		-----		0.143		-----		-----		---
2	810	1390	-----	-----	-----	-----		-----		0.106		0.105		---
	835	1415	0.66	-----	0.048	-----		-----		-----		-----		-100
	845	1425	-----	0.61	-----	0.045	-----	-----		-----		-----		---
	1005	1505	0.71	-----	0.055	-----		-----		-----		-----		217
	1015	1515	-----	0.68	-----	0.056	-----	-----		-----		-----		---
	1105	1565	0.76	-----	0.070	-----		-----		-----		-----		50
	1115	1575	-----	0.79	-----	0.066	-----	-----		-----		-----		---
	1200	1620	-----	-----	-----	-----		-----		0.086		0.101		---
	1205	1625	0.76	-----	0.071	-----		-----		-----		-----		---
	1215	1635	-----	0.83	-----	0.067	-----	-----		-----		-----		---
	1305	1685	0.82	-----	0.070	-----		-----		-----		-----		-50
	1315	1695	-----	0.88	-----	0.059	-----	-----		-----		-----		---
	1405	1745	0.85	-----	0.068	-----		-----		-----		-----		16
	1415	1755	-----	0.92	-----	0.056	-----	-----		-----		-----		---
	1505	1805	0.51	-----	0.063	-----		-----		-----		-----		50
	1510	1810	-----	-----	-----	-----		-----		0.093		0.100		---
	1515	1815	-----	0.89	-----	0.059	-----	-----		-----		-----		---

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	HCHO	HCHO	PART.024	PART.024	PART.042	PART.042
	PPM	PPM	PART/CC	PART/CC	PART/CC	PART/CC
	CA	CA	TSI-023	TSI-023	TSI-023	TSI-023
000	-----	-----	-2839.	-2839.	435.	435.
---	0.005	0.000	-----	-----	-----	-----
---	-----	-----	167.	-----	87.	-----
000	-----	-----	-----	9.8E 04	-----	8700.
---	-----	-----	1.8E 05	-----	1.4E 04	-----
006	-----	-----	-----	6.1E 04	-----	4.3E 04
---	-----	-----	1.2E 05	-----	5.8E 04	-----
023	-----	-----	-----	1.1E 04	-----	4.3E 04
---	0.019	0.020	-----	-----	-----	-----
---	-----	-----	3.9E 04	-----	7.1E 04	-----
047	-----	-----	-----	-1336.	-----	1.3E 04
---	-----	-----	8016.	-----	4.6E 04	-----
103	-----	-----	-----	835.	-----	6177.
---	-----	-----	2839.	-----	1.9E 04	-----
120	-----	-----	-----	-334.	-----	2784.
---	-----	-----	-1002.	-----	6351.	-----
154	-----	-----	-----	1002.	-----	87.
---	-----	-----	-334.	-----	4524.	-----
0.068	0.072	-----	-----	-----	-----	-----
143	-----	-----	-----	2839.	-----	-1392.
---	0.106	0.105	-----	-----	-----	-----
---	-----	-----	-1002.	-----	87.	-----
045	-----	-----	-----	0.	-----	696.
---	-----	-----	2171.	-----	2001.	-----
056	-----	-----	-----	-334.	-----	348.
---	-----	-----	501.	-----	1740.	-----
066	-----	-----	-----	-167.	-----	261.
---	0.086	0.101	-----	-----	-----	-----
---	-----	-----	0.	-----	348.	-----
067	-----	-----	-----	334.	-----	522.
---	-----	-----	-501.	-----	174.	-----
059	-----	-----	-----	835.	-----	-174.
---	-----	-----	167.	-----	0.	-----
056	-----	-----	-----	-835.	-----	0.
---	-----	-----	501.	-----	87.	-----
0.093	0.100	-----	-----	167.	-----	87.
059	-----	-----	-----	-----	-----	-----

2

AFF- 77
 JP-4 (PET) VS JP-8 (SHALE)
 1981, MAY 12-13

	CLOCK	ELAPSED TIME	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SII PART TSI-
DY	HR.	(MIN)							
1	605	-175	178,	178,	-241,	-241,	62,	62,	-2
1	835	-25	-133,	-----	169,	-----	-49,	-----	---
1	845	-15	-----	1998,	-----	-169,	-----	-25,	---
1	1005	65	1820,	-----	-24,	-----	49,	-----	-1
1	1015	75	-----	1.1E 04	-----	193,	-----	86,	---
1	1105	125	1.2E 04	-----	337,	-----	-74,	-----	3
1	1115	135	-----	3.6E 04	-----	723,	-----	25,	---
1	1205	185	3.3E 04	-----	747,	-----	-25,	-----	---
1	1215	195	-----	6.1E 04	-----	2193,	-----	49,	---
1	1305	245	5.6E 04	-----	1301,	-----	25,	-----	1
1	1315	255	-----	6.8E 04	-----	4362,	-----	135,	---
1	1405	305	6.4E 04	-----	2603,	-----	49,	-----	2
1	1415	315	-----	6.1E 04	-----	6941,	-----	74,	---
1	1505	365	6.0E 04	-----	3133,	-----	185,	-----	---
1	1515	375	-----	5.0E 04	-----	6796,	-----	49,	---
1	1605	425	4.8E 04	-----	3412,	-----	25,	-----	2
1	1615	435	-----	3.9E 04	-----	6025,	-----	25,	---
2	835	1415	1110,	-----	265,	-----	12,	-----	-
2	845	1425	-----	1332,	-----	747,	-----	-86,	---
2	1005	1505	1332,	-----	313,	-----	12,	-----	6
2	1015	1515	-----	1465,	-----	675,	-----	-49,	---
2	1105	1565	3730,	-----	530,	-----	0,	-----	-
2	1115	1575	-----	2042,	-----	627,	-----	49,	---
2	1205	1625	4662,	-----	530,	-----	12,	-----	2
2	1215	1635	-----	1732,	-----	602,	-----	62,	---
2	1305	1685	4040,	-----	699,	-----	-25,	-----	2
2	1315	1625	-----	1865,	-----	482,	-----	37,	---
2	1405	1745	3108,	-----	482,	-----	74,	-----	4
2	1415	1755	-----	1554,	-----	530,	-----	37,	---
2	1505	1805	1998,	-----	602,	-----	-148,	-----	8
2	1515	1815	-----	1021,	-----	193,	-----	148,	---

----- NO DATA TAKEN

NOTES

A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.

12 NOV 1981
PAGE 8

2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
.	62.	62.	-27.	-27.	46.	46.
--	-49.	-----	7.	-----	4.	-----
.	-----	-25.	-----	80.	-----	-14.
--	49.	-----	-13.	-----	7.	-----
.	-----	86.	-----	13.	-----	0.
--	-74.	-----	33.	-----	14.	-----
.	-----	25.	-----	0.	-----	4.
--	-25.	-----	0.	-----	11.	-----
.	-----	49.	-----	-7.	-----	18.
--	25.	-----	13.	-----	4.	-----
.	-----	135.	-----	0.	-----	0.
--	49.	-----	33.	-----	4.	-----
.	-----	74.	-----	-53.	-----	35.
--	185.	-----	7.	-----	4.	-----
.	-----	49.	-----	0.	-----	21.
--	25.	-----	27.	-----	7.	-----
.	-----	25.	-----	127.	-----	-42.
--	12.	-----	-7.	-----	21.	-----
.	-----	-86.	-----	80.	-----	-4.
--	12.	-----	67.	-----	-14.	-----
.	-----	-49.	-----	0.	-----	18.
--	0.	-----	-7.	-----	7.	-----
.	-----	49.	-----	-33.	-----	7.
--	12.	-----	20.	-----	-4.	-----
.	-----	62.	-----	-7.	-----	0.
--	-25.	-----	20.	-----	-18.	-----
.	-----	37.	-----	7.	-----	11.
--	74.	-----	40.	-----	-25.	-----
.	-----	37.	-----	20.	-----	0.
--	-148.	-----	80.	-----	-18.	-----
.	-----	148.	-----	100.	-----	-11.

NITOR.

2

AFF- 78
JP-8(PET) VERSUS JP-4(PET)
1981, MAY 14-15

DAY 1 (MAY 14)

0445: START FILL. WET: 7.0 PSIG; DRY: 0.0 PSIG; DEW PT: 6.2 C; RH: 47%
0626: INJECT 4.0 ML NO2
0628: INJECT 14.5 ML NO
0635: DIVIDE BAG
0639: INJECT 385 MICROLITERS JP-8(PET) INTO SIDE A
0656: INJECT 370 MICROLITERS JP-4(PET) INTO SIDE B
0900: UNCOVER BAG (T=0)
0901: WEATHER: VERY CLOUDY, NO DIRECT SUNLIGHT
1000: STILL QUITE CLOUDY.
1200: CLOUDS ARE LIGHTER, BUT STILL NO DIRECT SUN.
1400: STILL QUITE CLOUDY.
1620: END OF SAMPLING.

DAY 2 (MAY 15)

0900: UNCOVER BAG
0901: WEATHER: CLOUDY, BUT SLIGHT CLEARING.
1230: THERE WAS SOME CLEARING OF THE CLOUDS BETWEEN
10:00 AND 12:00, BUT THE SKY IS AGAIN CLOUDY.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	23(+-2)	24(+-1)
AVG.UV(MW/CM2)	1.7(+0.6)	2.7(+0.9)

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	22.0	2.8	DEG C
T	DORIC-1	22.0	2.9	DEG C
UV RAD	EFFLEY-2	2.18	0.88	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.292	PPM
NO	B-NOX-1	0.291	PPM
NO2-UNC	B-NOX-1	0.106	PPM
NO2-UNC	B-NOX-1	0.102	PPM
THC	BK6800-1	17.50	PPMC
THC	BK6800-1	24.50	PPMC

AFF- 78
JP-8(PET) VERSUS JP-4(PET)
1981, MAY 14-15

INSTRUMENTS USED		SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DCRIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PRT, CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP, GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLARE GC; FID
2100	FN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EFFLEY-2	EFFLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 78
 JP-8(PET) VERSUS JP-4(PET)
 1981, MAY 14-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX- PPM B-NO	NOX- PPM B-NO	NOX- PPM B-NO
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.
1 835	-25	0.016 A	-----	0.292	-----	0.106	-----	0.	-----	0.
1 845	-15	-----	0.000	-----	0.291	-----	0.102	-----	0.102	-----
1 1005	65	0.020	-----	0.251	-----	0.139	-----	0.	-----	0.
1 1015	75	-----	0.000	-----	0.202	-----	0.179	-----	0.179	-----
1 1105	125	0.025	-----	0.196	-----	0.179	-----	0.	-----	0.
1 1115	135	-----	0.010	-----	0.101	-----	0.268	-----	0.268	-----
1 1205	185	0.026	-----	0.140	-----	0.232	-----	0.	-----	0.
1 1215	195	-----	0.053	-----	0.027	-----	0.336	-----	0.336	-----
1 1305	245	0.045	-----	0.080	-----	0.274	-----	0.	-----	0.
1 1315	255	-----	0.146	-----	0.006	-----	0.325	-----	0.325	-----
1 1405	305	0.064	-----	0.030	-----	0.312	-----	0.	-----	0.
1 1415	315	-----	0.221	-----	0.002	-----	0.291	-----	0.291	-----
1 1505	365	0.082	-----	0.011	-----	0.318	-----	0.	-----	0.
1 1515	375	-----	0.253	-----	0.001	-----	0.259	-----	0.259	-----
1 1605	425	0.070	-----	0.011	-----	0.306	-----	0.	-----	0.
1 1615	435	-----	0.293	-----	0.001	-----	0.232	-----	0.232	-----
785	2 835	1415	0.015	-----	0.001	-----	0.161	-----	0.	-----
	2 845	1425	-----	0.109	-----	0.001	-----	0.062	-----	0.
	2 1005	1505	0.135	-----	0.003	-----	0.140	-----	0.	-----
	2 1015	1515	-----	0.136	-----	0.003	-----	0.070	-----	0.
	2 1105	1565	0.248	-----	0.001	-----	0.119	-----	0.	-----
	2 1115	1575	-----	0.174	-----	0.003	-----	0.078	-----	0.
	2 1205	1625	0.366	-----	0.002	-----	0.099	-----	0.	-----
	2 1215	1635	-----	0.216	-----	0.003	-----	0.081	-----	0.
	2 1305	1685	0.370	-----	0.000	-----	0.087	-----	0.	-----
	2 1315	1695	-----	0.228	-----	0.003	-----	0.081	-----	0.
2 1405	1745	0.394	-----	0.002	-----	0.082	-----	0.	-----	0.
2 1415	1755	-----	0.256	-----	0.005	-----	0.085	-----	0.085	-----
2 1505	1805	0.396	-----	0.000	-----	0.082	-----	0.	-----	0.
2 1515	1815	-----	0.272	-----	0.003	-----	0.082	-----	0.082	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0.000	0.000	0.000	0.000	0.77	0.77
0.106	-----	0.401	-----	17.50	-----
0.139	-----	0.399	-----	16.90	-----
0.179	-----	0.179	-----	23.90	-----
0.179	-----	0.387	-----	17.00	-----
0.232	-----	0.268	-----	23.80	-----
0.232	-----	0.380	-----	17.30	-----
0.274	-----	0.336	-----	23.70	-----
0.274	-----	0.358	-----	17.50	-----
0.325	-----	0.325	-----	22.90	-----
0.312	-----	0.335	-----	16.70	-----
0.312	-----	0.291	-----	22.50	-----
0.318	-----	0.322	-----	16.50	-----
0.318	-----	0.259	-----	21.90	-----
0.306	-----	0.311	-----	16.70	-----
0.306	-----	0.232	-----	22.30	-----
0.161	-----	0.160	-----	15.80	-----
0.062	-----	0.063	-----	21.80	-----
0.140	-----	0.141	-----	15.30	-----
0.070	-----	0.071	-----	21.30	-----
0.119	-----	0.118	-----	14.60	-----
0.078	-----	0.079	-----	21.50	-----
0.099	-----	0.097	-----	14.20	-----
0.081	-----	0.082	-----	20.80	-----
0.087	-----	0.087	-----	13.80	-----
0.081	-----	0.082	-----	20.90	-----
0.082	-----	0.083	-----	14.20	-----
0.085	-----	0.083	-----	20.70	-----
0.082	-----	0.082	-----	13.20	-----
0.082	-----	0.082	-----	20.30	-----

2

AFF- 78

JP-8(PET) VERSUS JP-4(PET)
1981, MAY 14-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2	SIDE 1	SIDE 2	SIDE 1	SI #PART>.3	#PA PART/CC CLIMET	SI PAR CL
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC EPPLEY-2	CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143			
1 605	-175	15.6	15.6	-----	0.0	0.0	0.	0.	0.	---
1 835	-25	17.9	-----	-----	33.0	-----	-----	0.	0.	---
1 845	-15	-----	17.6	-----	-----	0.0	-----	-----	0.	---
1 1005	65	21.3	-----	2.05	19.0	-----	-----	0.	0.	---
1 1015	75	-----	22.4	2.36	-----	41.5	-----	-----	0.	---
1 1105	125	22.2	-----	1.82	14.0	-----	-----	0.	0.	---
1 1115	135	-----	22.6	2.18	-----	27.0	-----	-----	0.	---
1 1205	185	23.7	-----	2.18	10.0	-----	-----	0.	0.	---
1 1215	195	-----	23.2	1.96	-----	18.0	-----	-----	0.	---
1 1305	245	25.8	-----	2.79	8.2	-----	-----	0.	0.	---
1 1315	255	-----	25.0	2.36	-----	13.7	-----	-----	0.	---
1 1405	305	23.1	-----	1.32	6.0	-----	-----	5.	5.	---
1 1415	315	-----	22.3	1.14	-----	10.0	-----	-----	0.	---
1 1505	365	21.8	-----	0.86	4.5	-----	-----	50.	50.	---
1 1515	375	-----	20.9	0.80	-----	7.7	-----	-----	0.	---
1 1605	425	21.0	-----	1.28	3.8	-----	-----	118.	118.	---
1 1615	435	-----	20.6	1.14	-----	6.3	-----	-----	0.	---
2 835	1415	18.1	-----	-----	0.0	-----	-----	186.	186.	---
	845	1425	-----	17.6	-----	-----	0.2	-----	-----	0.
	1005	1505	22.0	-----	2.63	2.2	-----	187.	187.	---
	1015	1515	-----	23.5	3.73	-----	0.2	-----	-----	17.
	1105	1565	22.9	-----	3.59	2.1	-----	299.	299.	---
	1115	1575	-----	25.0	4.15	-----	0.8	-----	392.	14.
	1205	1625	24.5	-----	2.09	1.4	-----	392.	392.	---
	1215	1635	-----	23.1	1.18	-----	0.6	-----	388.	12.
	1305	1685	22.3	-----	2.18	0.9	-----	388.	388.	---
	1315	1695	-----	23.4	2.18	-----	0.5	-----	393.	11.
	1405	1745	25.6	-----	3.32	0.7	-----	393.	393.	---
	1415	1755	-----	25.5	2.82	-----	0.3	-----	413.	12.
	1505	1805	24.9	-----	2.41	0.4	-----	413.	413.	---
	1515	1815	-----	24.3	2.23	-----	0.2	-----	413.	13.

----- NO DATA TAKEN

12 NOV 1981

PAGE 4

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	0.	-----	0.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
41.5	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
27.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
18.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
13.7	-----	1.	-----	0.	-----	0.
-----	5.	-----	0.	-----	0.	-----
10.0	-----	1.	-----	0.	-----	0.
-----	50.	-----	0.	-----	0.	-----
7.7	-----	2.	-----	0.	-----	0.
-----	118.	-----	2.	-----	0.	-----
6.3	-----	6.	-----	0.	-----	0.
-----	186.	-----	144.	-----	0.	-----
0.2	-----	65.	-----	1.	-----	0.
-----	187.	-----	48.	-----	1.	-----
0.2	-----	179.	-----	13.	-----	0.
-----	299.	-----	100.	-----	3.	-----
0.8	-----	164.	-----	14.	-----	0.
-----	392.	-----	195.	-----	15.	-----
0.6	-----	129.	-----	14.	-----	0.
-----	388.	-----	197.	-----	17.	-----
0.5	-----	111.	-----	14.	-----	0.
-----	393.	-----	191.	-----	15.	-----
0.3	-----	125.	-----	18.	-----	0.
-----	413.	-----	158.	-----	13.	-----
0.2	-----	139.	-----	18.	-----	0.

2

AFF- 78
 JP-8(PET) VERSUS JP-4(PET)
 1981, MAY 14-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT MRI-388	SIDE 2 BSCAT MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SII AEF UM2 TSI-
		10-4 M-1	10-4 M-1	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1 605	-175	0.0	0.0	8.	8.	-575.	-575.	4
1 725	-95	-----	-----	-----	-----	-----	-----	---
1 835	-25	0.0	-----	1.	-----	1.2E 05	-----	28
1 845	-15	-----	0.0	-----	-0.	-----	811.	---
1 1005	65	0.0	-----	3.	-----	9.8E 04	-----	32
1 1015	75	-----	0.0	-----	2.	-----	1.1E 05	---
1 1105	125	0.1	-----	5.	-----	7.7E 04	-----	42
1 1115	135	-----	0.1	-----	7.	-----	1.2E 05	---
1 1205	185	0.3	-----	7.	-----	5.7E 04	-----	49
1 1215	195	-----	0.3	-----	6.	-----	1.0E 05	---
1 1305	245	0.8	-----	3.	-----	4.3E 04	-----	52
1 1315	255	-----	0.5	-----	7.	-----	7.0E 04	---
1 1405	305	2.5	-----	9.	-----	3.4E 04	-----	60
1 1415	315	-----	0.8	-----	7.	-----	5.2E 04	---
1 1505	365	3.2	-----	10.	-----	3.0E 04	-----	56
1 1515	375	-----	1.2	-----	8.	-----	4.1E 04	---
1 1605	425	4.3	-----	7.	-----	2.3E 04	-----	48
1 1615	435	-----	1.2	-----	8.	-----	2.8E 04	---
2 730	1350	-----	-----	-----	-----	-----	-----	---
2 835	1415	1.5	-----	3.	-----	2274.	-----	6
2 845	1425	-----	0.5	-----	5.	-----	816.	---
2 1005	1505	3.3	-----	5.	-----	1.4E 04	-----	26
2 1015	1515	-----	0.8	-----	2.	-----	3751.	---
2 1105	1565	7.5	-----	8.	-----	1.5E 04	-----	37
2 1115	1575	-----	0.9	-----	1.	-----	4137.	---
2 1205	1625	12.0	-----	7.	-----	1.1E 04	-----	35
2 1215	1635	-----	0.9	-----	-0.	-----	5182.	---
2 1305	1685	11.2	-----	6.	-----	1.1E 04	-----	30
2 1315	1695	-----	1.1	-----	0.	-----	4816.	---
2 1405	1745	9.5	-----	5.	-----	7465	-----	22
2 1415	1755	-----	1.0	-----	-1.	-----	3850.	---
2 1505	1805	7.0	-----	3.	-----	4114.	-----	15
2 1515	1815	-----	1.0	-----	-2.	-----	3441.	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1
-575.	-575.	49.	49.	0.0009	0.0009
-----	-----	-----	-----	-----	0.0069
1.2E 05	-----	284.	-----	0.0014	-----
-----	811.	-----	-8.	-----	-----
9.8E 04	-----	338.	-----	-----	-----
-----	1.1E 05	-----	219.	-----	-----
7.7E 04	-----	423.	-----	-----	-----
-----	1.2E 05	-----	387.	-----	-----
5.7E 04	-----	490.	-----	-----	-----
-----	1.0E 05	-----	494.	-----	-----
4.3E 04	-----	523.	-----	-----	-----
-----	7.0E 04	-----	584.	-----	-----
3.4E 04	-----	600.	-----	-----	-----
-----	5.2E 04	-----	632.	-----	-----
3.0E 04	-----	565.	-----	0.0015	-----
-----	4.1E 04	-----	609.	-----	-----
2.3E 04	-----	482.	-----	-----	-----
-----	2.8E 04	-----	538.	-----	0.0071
-----	-----	-----	-----	0.0017	-----
2274.	-----	67.	-----	-----	-----
-----	816.	-----	71.	-----	0.0071
1.4E 04	-----	266.	-----	-----	-----
-----	3751.	-----	55.	-----	-----
1.5E 04	-----	370.	-----	-----	-----
-----	411.	-----	69.	-----	-----
1.1E 04	-----	503.	-----	-----	-----
-----	5 32.	-----	79.	-----	-----
1.1E 04	-----	301.	-----	-----	-----
-----	4816.	-----	86.	-----	-----
7465.	-----	228.	-----	0.0017	-----
-----	3850.	-----	76.	-----	-----
414.	-----	156.	-----	-----	-----
---	3441.	-----	40.	-----	0.0071

2

AFF- 78

JP-8(PET) VERSUS JP-4(PET)
1981, MAY 14-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 2	SIDE 2	SIDE 2	SIDE 2	SIDE 2	SIDE 2
		N-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM VAR 3700	N-C7 PPM VAR 3700	MECYC-C6 PPM VAR 3700	N-C8 PPM VAR 3700	N VAR	
1 605	-175	-----	-----	-----	-----	-----	-----	-----	-----
1 725	-95	-----	0.0437	0.1046	0.1287	0.0787	0.1200	0.	
1 835	-25	0.0006	-----	-----	-----	-----	-----	-----	
1 1015	75	-----	-----	0.1039	0.1274	0.0781	0.1183	0.	
1 1105	125	-----	-----	-----	-----	-----	-----	-----	
1 1215	195	-----	-----	0.1063	0.1238	0.0736	0.1049	0.	
1 1305	245	-----	-----	-----	-----	-----	-----	-----	
1 1415	315	-----	-----	0.1011	0.1232	0.0733	0.1046	0.	
1 1505	365	0.0006	-----	-----	-----	-----	-----	-----	
1 1615	435	-----	0.0427	0.0978	0.1153	0.0693	0.1002	0.	
2 730	1350	0.0007	-----	-----	-----	-----	-----	-----	
2 945	1425	-----	0.0422	0.1001	0.1212	0.0723	0.1061	0.	
2 1005	1505	-----	-----	-----	-----	-----	-----	-----	
2 1115	1575	-----	-----	0.0930	0.1162	0.0670	0.0982	0.	
2 1205	1625	-----	-----	-----	-----	-----	-----	-----	
2 1315	1695	-----	-----	0.0924	0.1112	0.0648	0.0956	0.	
2 1405	1745	0.0008	-----	-----	-----	-----	-----	-----	
2 1515	1815	-----	0.0410	0.0916	0.1073	0.0640	0.0947	0.	

----- NO DATA TAKEN

300

12 NOV 1981
PAGE 6

DE 2 -C7 PM 3700	SIDE 2 MECYC-C6 PPM VAR 3700	SIDE 2 N-C8 PPM VAR 3700	SIDE 2 N-C9 PPM VAR 3700	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700	SIDE 1 N-C11 PPM VAR 3700	SIDE 2 N-C11 PPM VAR 3700
-----	-----	-----	-----	-----	-----	-----	-----
1287	0.0787	0.1200	0.0611	-----	0.0369	-----	0.0413
-----	-----	-----	-----	0.0245	-----	0.0795	-----
1274	0.0781	0.1183	0.0559	-----	0.0351	-----	0.0416
-----	-----	-----	-----	0.0231	-----	0.0754	-----
1238	0.0736	0.1049	0.0533	-----	0.0333	-----	0.0393
-----	-----	-----	-----	0.0234	-----	0.0798	-----
1232	0.0733	0.1046	0.0530	-----	0.0329	-----	0.0392
-----	-----	-----	-----	0.0229	-----	0.0725	-----
1153	0.0693	0.1002	0.0503	-----	0.0313	-----	0.0375
-----	-----	-----	-----	0.0217	-----	0.0672	-----
1212	0.0723	0.1061	0.0519	-----	0.0325	-----	0.0394
-----	-----	-----	-----	0.0219	-----	0.0678	-----
1162	0.0670	0.0982	0.0482	-----	0.0297	-----	0.0358
-----	-----	-----	-----	0.0214	-----	0.0667	-----
1112	0.0648	0.0956	0.0473	-----	0.0292	-----	0.0345
-----	-----	-----	-----	0.0208	-----	0.0646	-----
1073	0.0640	0.0947	0.0464	-----	0.0283	-----	0.0348

2

AFF- 78
 JP-8(PET) VERSUS JP-4(PET)
 1981, MAY 14-15

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE
		N-C12 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C14 PPM	VAR 3700	N-C14 PPM	VAR 3700	O-X1 PPM
1 725	-95	-----	0.0318	-----	0.0228	-----	0.015	0.01	-----	-----	-----	-----	-----	
1 835	-25	0.0759	-----	0.0598	-----	0.052	-----	-----	-----	-----	-----	-----	-----	
1 1015	75	-----	0.0415	-----	0.0277	-----	0.019	0.01	-----	-----	-----	-----	-----	
1 1105	125	0.0743	-----	0.0363	-----	0.047	-----	-----	-----	-----	-----	-----	-----	
1 1215	195	-----	0.0345	-----	0.0252	-----	0.017	0.01	-----	-----	-----	-----	-----	
1 1305	245	0.0775	-----	0.0629	-----	0.050	-----	-----	-----	-----	-----	-----	-----	
1 1415	315	-----	0.0355	-----	0.0278	-----	0.019	0.01	-----	-----	-----	-----	-----	
1 1505	365	0.0685	-----	0.0516	-----	0.007	-----	-----	-----	-----	-----	-----	-----	
1 1615	435	-----	0.0330	-----	0.0250	-----	0.017	0.01	-----	-----	-----	-----	-----	
2 730	1350	0.0673	-----	0.0564	-----	0.010	-----	-----	-----	-----	-----	-----	-----	
2 845	1425	-----	0.0322	-----	0.0243	-----	0.018	0.01	-----	-----	-----	-----	-----	
2 1005	1505	0.0696	-----	0.0516	-----	0.043	-----	-----	-----	-----	-----	-----	-----	
2 1115	1575	-----	0.0309	-----	0.0233	-----	0.018	0.01	-----	-----	-----	-----	-----	
2 1205	1625	0.0634	-----	0.0470	-----	0.035	-----	-----	-----	-----	-----	-----	-----	
2 1315	1695	-----	0.0287	-----	0.0221	-----	0.015	0.01	-----	-----	-----	-----	-----	
2 1405	1745	0.0584	-----	0.0411	-----	0.028	-----	-----	-----	-----	-----	-----	-----	
2 1515	1815	-----	0.0301	-----	0.0210	-----	0.013	0.01	-----	-----	-----	-----	-----	

----- NO DATA TAKEN

301

12 NOV 1981
PAGE 7

	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700	SIDE 2 O-XYL PPM VAR 3700	SIDE 2 M-XYL PPM VAR 3700	SIDE 2 C2BENZ PPM VAR 3700	SIDE 2 I-C3-BZ PPM VAR 3700	SIDE 2 N-C3-BZ PPM VAR 3700
228	----- 0.052	0.015 -----	0.0190 -----	0.0804 -----	0.0254 -----	0.0039 -----	0.0047 -----
277	----- 0.047	0.019 -----	0.0140 -----	0.0730 -----	0.0214 -----	0.0035 -----	0.0039 -----
252	----- 0.050	0.017 -----	0.0161 -----	0.0718 -----	0.0155 -----	0.0034 -----	0.0038 -----
278	----- 0.007	0.019 -----	0.0157 -----	0.0705 -----	0.0157 -----	0.0035 -----	0.0036 -----
250	----- 0.010	0.017 -----	0.0150 -----	0.0673 -----	0.0150 -----	0.0031 -----	0.0036 -----
243	----- 0.043	0.018 -----	0.0168 -----	0.0697 -----	0.0226 -----	0.0036 -----	0.0040 -----
233	----- 0.035	0.018 -----	0.0151 -----	0.0631 -----	0.0145 -----	0.0035 -----	0.0038 -----
221	----- 0.028	0.015 -----	0.0149 -----	0.0620 -----	0.0147 -----	0.0031 -----	0.0038 -----
210	----- 0.013	0.0145 -----	0.0603 -----	0.0225 -----	0.0035 -----	0.0040 -----	

2

AFF- 78
 JP-8(PET) VERSUS JP-4(PET)
 1981, MAY 14-15

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE HCl C1
		124TMEBZ VAR 3700	PPM	124TMEBZ VAR 3700	PPM	CO PPM BK6800-1	CO PPM BK6800-1	ECD-3	PAN PPM	ECD-3	PAN PPM	ECD-3	HCl PPI C1	
1 605	-175	-----	-----	0.53	0.53	0.000	0.000	-----	-----	-----	-----	-----		
1 725	-95	-----	0.0247	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 810	-50	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0		
1 835	-25	0.0073	-----	0.52	-----	0.000	-----	-----	-----	-----	-----	-----		
1 845	-15	-----	-----	-----	0.55	-----	0.000	-----	-----	0.000	-----	-----		
1 1005	65	-----	-----	0.59	-----	0.000	-----	-----	-----	-----	-----	-----		
1 1015	75	-----	0.0225	-----	0.72	-----	0.001	-----	-----	-----	-----	-----		
1 1104	124	0.0064	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1105	125	-----	-----	0.57	-----	0.001	-----	-----	-----	-----	-----	-----		
1 1115	135	-----	-----	-----	0.56	-----	0.006	-----	-----	-----	-----	-----		
1 1200	180	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0		
1 1205	185	-----	-----	1.93	-----	0.002	-----	-----	-----	-----	-----	-----		
1 1215	195	-----	0.0198	-----	0.59	-----	0.013	-----	-----	-----	-----	-----		
1 1305	245	0.0060	-----	0.60	-----	0.006	-----	-----	-----	-----	-----	-----		
1 1315	255	-----	-----	-----	0.55	-----	0.024	-----	-----	-----	-----	-----		
1 1405	305	-----	-----	0.63	-----	0.011	-----	-----	-----	-----	-----	-----		
1 1415	315	-----	0.0182	-----	0.56	-----	0.035	-----	-----	-----	-----	-----		
1 1505	365	0.0057	-----	0.60	-----	0.016	-----	-----	-----	-----	-----	-----		
1 1515	375	-----	-----	-----	0.60	-----	0.044	-----	-----	-----	-----	-----		
1 1605	425	-----	-----	0.59	-----	0.019	-----	-----	-----	-----	-----	-----		
1 1610	430	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0		
1 1615	435	-----	0.0168	-----	0.61	-----	0.054	-----	-----	-----	-----	-----		
2 730	1350	0.0059	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
2 810	1390	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0		
2 835	1415	-----	-----	0.62	-----	0.021	-----	-----	-----	-----	-----	-----		
2 845	1425	-----	0.0173	-----	0.53	-----	0.056	-----	-----	-----	-----	-----		
2 1005	1505	0.0057	-----	0.64	-----	0.029	-----	-----	-----	-----	-----	-----		
2 1015	1515	-----	-----	-----	0.65	-----	0.063	-----	-----	-----	-----	-----		
2 1105	1565	-----	-----	0.66	-----	0.042	-----	-----	-----	-----	-----	-----		
2 1115	1575	-----	0.0144	-----	0.70	-----	0.073	-----	-----	-----	-----	-----		
2 1200	1620	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0		
2 1205	1625	0.0049	-----	0.70	-----	0.040	-----	-----	-----	-----	-----	-----		
2 1215	1635	-----	-----	-----	0.70	-----	0.069	-----	-----	-----	-----	-----		
2 1305	1685	-----	-----	0.98	-----	0.062	-----	-----	-----	-----	-----	-----		
2 1315	1695	-----	0.0134	-----	0.72	-----	0.076	-----	-----	-----	-----	-----		
2 1405	1745	0.0045	-----	0.68	-----	0.074	-----	-----	-----	-----	-----	-----		
2 1415	1755	-----	-----	-----	0.97	-----	0.079	-----	-----	-----	-----	-----		
2 1505	1805	-----	-----	0.75	-----	0.085	-----	-----	-----	-----	-----	-----		
2 1510	1810	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0		
2 1515	1815	-----	0.0129	-----	0.77	-----	0.083	-----	-----	-----	-----	-----		

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART,024 PART/CC TSI-023	SIDE 2 PART,024 PART/CC TSI-023
0.000	0.000	-----	-----	-334.	-334.
-----	-----	-----	-----	-----	-----
-----	-----	0.006	0.000	-----	-----
0.000	-----	-----	-----	1.0E 05	-----
-----	0.000	-----	-----	-----	334.
0.000	-----	-----	-----	7.1E 04	-----
-----	0.001	-----	-----	-----	1.0E 05
-----	-----	-----	-----	-----	-----
0.001	-----	-----	-----	3.7E 04	-----
-----	0.006	-----	-----	-----	1.0E 05
-----	-----	0.004	0.017	-----	-----
0.002	-----	-----	-----	1.3E 04	-----
-----	0.013	-----	-----	-----	5.4E 04
0.006	-----	-----	-----	2672.	-----
-----	0.024	-----	-----	-----	1.6E 04
0.011	-----	-----	-----	167.	-----
-----	0.035	-----	-----	-----	2338.
0.016	-----	-----	-----	668.	-----
-----	0.044	-----	-----	-----	2171.
0.019	-----	-----	-----	334.	-----
-----	-----	0.021	0.038	-----	-----
-----	0.054	-----	-----	-----	-2839.
-----	-----	-----	-----	-----	-----
-----	-----	0.027	0.037	-----	-----
0.021	-----	-----	-----	167.	-----
-----	0.056	-----	-----	-----	-668.
0.029	-----	-----	-----	0.	-----
-----	0.063	-----	-----	-----	1169.
0.042	-----	-----	-----	-167.	-----
-----	0.073	-----	-----	-----	167.
-----	-----	0.033	0.044	-----	-----
0.040	-----	-----	-----	-1336.	-----
-----	0.069	-----	-----	-----	1002.
0.062	-----	-----	-----	1670.	-----
-----	0.076	-----	-----	-----	1336.
0.074	-----	-----	-----	1670.	-----
-----	0.079	-----	-----	-----	167.
0.085	-----	-----	-----	-835.	-----
-----	-----	0.058	0.058	-----	-----
-----	0.083	-----	-----	-----	1002.

2

AFF- 78

JP-8(PET) VERSUS JP-4(PET)
1981, MAY 14-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		PART.042 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PAF TSI
1 605	-175	-348.	-348.	178.	178.	-72.	-72.	
1 835	-25	1.3E 04	-----	2353.	-----	-24.	-----	1
1 845	-15	-----	522.	-----	44.	-----	0.	--
1 1005	65	2.2E 04	-----	4484.	-----	145.	-----	
1 1015	75	-----	4089.	-----	577.	-----	48.	--
1 1105	125	3.1E 04	-----	9235.	-----	265.	-----	
1 1115	135	-----	1.9E 04	-----	3552.	-----	0.	--
1 1205	185	2.7E 04	-----	1.6E 04	-----	337.	-----	
1 1215	195	-----	3.6E 04	-----	8969.	-----	121.	--
1 1305	245	1.6E 04	-----	2.3E 04	-----	868.	-----	
1 1315	255	-----	3.5E 04	-----	1.9E 04	-----	337.	--
1 1405	305	5394.	-----	2.7E 04	-----	1422.	-----	
1 1415	315	-----	2.2E 04	-----	2.6E 04	-----	795.	--
1 1505	365	2784.	-----	2.5E 04	-----	1542.	-----	
1 1515	375	-----	1.1E 04	-----	2.7E 04	-----	916.	--
1 1605	425	696.	-----	2.0E 04	-----	1976.	-----	
1 1615	435	-----	5307.	-----	2.5E 04	-----	1301.	--
2 835	1415	348.	-----	1199.	-----	578.	-----	
2 845	1425	-----	-522.	-----	1687.	-----	313.	--
2 1005	1505	3045.	-----	9990.	-----	988.	-----	
2 1015	1515	-----	522.	-----	1954.	-----	96.	--
2 1105	1565	261.	-----	1.2E 04	-----	2265.	-----	
2 1115	1575	-----	1131.	-----	2442.	-----	337.	--
2 1205	1625	87.	-----	9013.	-----	3109.	-----	
2 1215	1635	-----	435.	-----	3108.	-----	651.	--
2 1305	1685	174.	-----	6083.	-----	3229.	-----	
2 1315	1695	-----	-174.	-----	3197.	-----	361.	--
2 1405	1745	-957.	-----	4085.	-----	2675.	-----	
2 1415	1755	-----	87.	-----	2975.	-----	554.	--
2 1505	1805	435.	-----	2753.	-----	1735.	-----	
2 1515	1815	-----	-348.	-----	2309.	-----	506.	--

----- NO DATA TAKEN

12 NOV 1981
PAGE 9

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
075	PART.133	PART.133	PART.237	PART.237	PART 422	PART.422
CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	-72.	-72.	0.	0.	-40.	-40.
	-24.	-----	111.	-----	-47.	-----
	-----	0.	-----	-86.	-----	-7.
	145.	-----	0.	-----	-7.	-----
	-----	48.	-----	0.	-----	0.
	265.	-----	12.	-----	20.	-----
	-----	0.	-----	-25.	-----	13.
	337.	-----	12.	-----	0.	-----
	-----	121.	-----	12.	-----	40.
	868.	-----	37.	-----	-33.	-----
04	-----	337.	-----	37.	-----	7.
	1422.	-----	-37.	-----	27.	-----
04	-----	795.	-----	0.	-----	-7.
	1542.	-----	37.	-----	13.	-----
04	-----	916.	-----	25.	-----	13.
	1976.	-----	37.	-----	0.	-----
04	-----	1301.	-----	-49.	-----	13.
	578.	-----	-12.	-----	-20.	-----
	-----	313.	-----	25.	-----	-47.
	988.	-----	25.	-----	0.	-----
	-----	96.	-----	0.	-----	7.
	2265.	-----	62.	-----	0.	-----
	-----	337.	-----	86.	-----	-27.
	3109.	-----	61.	-----	20.	-----
	-----	651.	-----	0.	-----	-7.
	3229.	-----	0.	-----	7.	-----
	-----	361.	-----	86.	-----	20.
	2675.	-----	-25.	-----	13.	-----
	-----	554.	-----	74.	-----	7.
	1735.	-----	12.	-----	13.	-----
	-----	506.	-----	12.	-----	-33.

2

AFF- 78

JP-8(PET) VERSUS JP-4(PET)
1981, MAY 14-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2
		PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 605	-175	42.	42.
1 835	-25	0.	-----
1 845	-15	-----	4.
1 1005	65	4.	-----
1 1015	75	-----	4.
1 1105	125	0.	-----
1 1115	135	-----	21.
1 1205	185	7.	-----
1 1215	195	-----	4.
1 1305	245	-11.	-----
1 1315	255	-----	0.
1 1405	305	0.	-----
1 1415	315	-----	0.
1 1505	365	7.	-----
1 1515	375	-----	0.
1 1605	425	0.	-----
1 1615	435	-----	4.
2 835	1415	14.	-----
2 845	1425	-----	28.
2 1005	1505	7.	-----
2 1015	1515	-----	4.
2 1105	1565	11.	-----
2 1115	1575	-----	0.
2 1205	1625	0.	-----
2 1215	1635	-----	-7.
2 1305	1685	4.	-----
2 1315	1695	-----	-11.
2 1405	1745	4.	-----
2 1415	1755	-----	-14.
2 1505	1805	0.	-----
2 1515	1815	-----	-7.

----- NO DATA TAKEN

NOTES

A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.

394

AFF- 79
JP-4(PET) VS JP-8(PET)
1981, MAY 19-20

DAY 1 (MAY 19)

0445: START FILL. WET: 7.0, DRY: 0.0, DEW PT.=9.8, R.H.=54%
0628: 4.0 ML. OF NO₂ INJECTED.
0630: 14.5 ML. OF NO INJECTED.
0632: END FILL
0633: MIX BAG
0638: DIVIDE BAG
0642: INJECT 385 MICROLITERS JP-8 (PET) INTO SIDE B. 2 MIN. OF
N₂ ONLY, THEN HEAT AT 250 DEGREES C FOR 30 MINUTES.
0659: INJECT 370 MICROLITERS JP-4 (PET) INTO SIDE A USING
HEAT GUN ON BULB FOR 15 MINUTES.
0716: MIX SIDE A AND SIDE B.
0905: WEATHER: VERY CLOUDY
1015: A LIGHT DRIZZLE STARTED.
1015: DRIZZLE STOPPED, BUT STILL VERY CLOUDY.
1100: SOME CLEARING, PARTIAL SUNLIGHT.
1620: END SAMPLING DAY 1.
1630: COVER BAG

DAY 2 (MAY 20)

0900: UNCOVER BAG
0930: WEATHER: CLOUDY, BUT CLEARING.
1000: SUN IS OUT.
1520: RUN OVER
1530: BAG DUMPED, PUMPED.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	24(+3)	24(+2)
AVG.UV(MW/CM ²)	2.2(+0.7)	2.5(+0.8)

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	22.0	3.4	DEG C
T	DORIC-1	23.3	3.7	DEG C
UV RAD	EPPELEY-2	2.32	0.77	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.278	PPM
NO	B-NOX-1	0.279	PPM
NO ₂ -UNC	B-NOX-1	0.091	PPM
NO ₂ -UNC	B-NOX-1	0.091	PPM
THC	BK6800-1	21.70	PPMC
THC	BK6800-1	19.30	PPMC

AFF- 79
JP-4(PET) VS JP-8(PET)
1981, MAY 19-20

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 79
 JP-4(PET) VS JP-8(PET)
 1981, MAY 19-20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SI
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	P B-N
		D-1790	D-1790	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	
1 615	-165	0.000	0.000	0.006	0.006	0.000	0.000	0
1 835	-25	0.006 A	-----	0.278	-----	0.091	-----	0
1 845	-15	-----	0.016 A	-----	0.279	-----	0.091	-----
1 1005	65	0.007	-----	0.248	-----	0.112	-----	0
1 1015	75	-----	0.017	-----	0.242	-----	0.122	-----
1 1105	125	0.008	-----	0.195	-----	0.161	-----	0
1 1115	135	-----	0.022	-----	0.211	-----	0.137	-----
1 1205	185	0.026	-----	0.091	-----	0.250	-----	0
1 1215	195	-----	0.026	-----	0.137	-----	0.202	-----
1 1305	245	0.091	-----	0.031	-----	0.295	-----	0
1 1315	255	-----	0.052	-----	0.060	-----	0.271	-----
1 1405	305	0.208	-----	0.012	-----	0.281	-----	0
1 1415	315	-----	0.112	-----	0.019	-----	0.290	-----
1 1505	365	0.328	-----	0.009	-----	0.246	-----	0
1 1515	375	-----	0.195	-----	0.011	-----	0.260	-----
1 1605	425	0.415	-----	0.000	-----	0.209	-----	0
1 1615	435	-----	0.252	-----	0.009	-----	0.222	-----
2 835	1415	0.211	-----	0.007	-----	0.063	-----	0
2 845	1425	-----	0.074	-----	0.009	-----	0.039	-----
2 1005	1505	0.209	-----	0.008	-----	0.069	-----	0
2 1015	1515	-----	0.106	-----	0.011	-----	0.052	-----
2 1105	1565	0.222	-----	0.009	-----	0.073	-----	0
2 1115	1575	-----	0.136	-----	0.012	-----	0.055	-----
2 1205	1625	0.254	-----	0.009	-----	0.078	-----	0
2 1215	1635	-----	0.169	-----	0.013	-----	0.063	-----
2 1305	1685	0.272	-----	0.010	-----	0.085	-----	0
2 1315	1695	-----	0.200	-----	0.014	-----	0.067	-----
2 1405	1745	0.302	-----	0.011	-----	0.087	-----	0
2 1415	1755	-----	0.220	-----	0.014	-----	0.070	-----
2 1505	1805	0.302	-----	0.010	-----	0.090	-----	0
2 1515	1815	-----	0.217	-----	0.015	-----	0.071	-----

----- NO DATA TAKEN

17 NOV 1981
PAGE 3

DE 2 NO PM DX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
.006	0.000	0.000	0.008	0.008	0.72	0.72
-----	0.091	-----	0.370	-----	21.70	-----
.279	-----	0.091	-----	0.368	-----	19.30
-----	0.112	-----	0.366	-----	21.50	-----
.242	-----	0.122	-----	0.367	-----	18.80
-----	0.161	-----	0.360	-----	21.60	-----
.211	-----	0.137	-----	0.357	-----	19.30
-----	0.250	-----	0.341	-----	21.10	-----
.137	-----	0.202	-----	0.342	-----	19.00
-----	0.295	-----	0.317	-----	20.90	-----
.060	-----	0.271	-----	0.324	-----	18.20
-----	0.281	-----	0.282	-----	20.40	-----
.019	-----	0.290	-----	0.297	-----	17.70
-----	0.246	-----	0.244	-----	19.70	-----
.011	-----	0.260	-----	0.260	-----	17.40
-----	0.209	-----	0.210	-----	19.10	-----
.009	-----	0.222	-----	0.225	-----	17.20
-----	0.063	-----	0.068	-----	18.70	-----
.009	-----	0.039	-----	0.049	-----	16.50
-----	0.069	-----	0.072	-----	18.60	-----
.011	-----	0.052	-----	0.060	-----	16.30
-----	0.073	-----	0.080	-----	18.40	-----
.012	-----	0.055	-----	0.067	-----	16.10
-----	0.078	-----	0.086	-----	18.40	-----
.013	-----	0.063	-----	0.073	-----	16.10
-----	0.085	-----	0.090	-----	18.20	-----
.014	-----	0.067	-----	0.077	-----	15.70
-----	0.087	-----	0.092	-----	18.00	-----
.014	-----	0.070	-----	0.081	-----	15.80
-----	0.090	-----	0.096	-----	17.90	-----
.015	-----	0.071	-----	0.081	-----	15.50

2

AFF- 79
 JP-4(PET) VS JP-8(PET)
 1981, MAY 19-20

	CLOCK	ELAPSED	SIDE 1	SIDE 2	UV RAD	SIDE 1	SIDE 2	SIDE 1	SIDE 1
	TIME	TIME	T DEG C	T DEG C	MW/CM2	CONDENS	CONDENS	PART/CC	#PART>.3
	DY HR.	(MIN)	DORIC-1	DORIC-1	EPPLEY-2	10E3/CC	10E3/CC	CLIMET	FAR CL
	1	615	-165	16.1	16.1	-----	0.0	0.0	0.
	1	835	-25	19.1	-----	-----	0.6	-----	0.
	1	845	-15	-----	19.8	-----	-----	28.0	-----
	1	1005	65	19.2	-----	1.82	40.0	-----	0.
	1	1015	75	-----	21.0	1.46	-----	17.0	-----
	1	1105	125	19.2	-----	1.37	27.0	-----	0.
	1	1115	135	-----	20.1	1.91	-----	12.0	-----
	1	1205	185	22.4	-----	2.27	20.0	-----	0.
	1	1215	195	-----	23.7	2.00	-----	9.8	-----
	1	1305	245	26.0	-----	3.91	14.3	-----	0.
	1	1315	255	-----	25.8	2.73	-----	6.8	-----
	1	1405	305	27.1	-----	2.73	10.8	-----	0.
	1	1415	315	-----	26.9	2.54	-----	4.5	-----
	1	1505	365	24.8	-----	2.54	8.5	-----	1.
	1	1515	375	-----	28.0	2.38	-----	3.6	-----
	1	1605	425	22.9	-----	1.44	7.2	-----	33.
	1	1615	435	-----	24.1	1.18	-----	2.6	-----
398	2	835	1415	15.9	-----	-----	0.2	-----	48.
	2	845	1425	-----	16.4	-----	-----	0.0	-----
	2	1005	1505	20.9	-----	3.46	2.7	-----	77.
	2	1015	1515	-----	22.5	2.73	-----	10.2	-----
	2	1105	1565	21.4	-----	1.82	2.2	-----	58.
	2	1115	1575	-----	23.9	2.73	-----	8.4	-----
	2	1205	1625	24.7	-----	3.46	1.3	-----	41.
	2	1215	1635	-----	26.0	3.00	-----	5.7	-----
	2	1305	1685	24.0	-----	2.73	0.6	-----	40.
	2	1315	1695	-----	26.3	2.91	-----	3.4	-----
	2	1405	1745	25.0	-----	2.32	0.4	-----	82.
	2	1415	1755	-----	27.5	2.80	-----	1.8	-----
	2	1505	1805	22.8	-----	1.09	0.3	-----	105.
	2	1515	1815	-----	24.1	1.05	-----	1.3	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

SIDE 2 ONDENS DE3/CC NC-143	SIDE 1 \$PART>.3 PART/CC CLIMET	SIDE 2 \$PART>.3 PART/CC CLIMET	SIDE 1 \$PART>.5 PART/CC CLIMET	SIDE 2 \$PART>.5 PART/CC CLIMET	SIDE 1 \$PART>1 PART/CC CLIMET	SIDE 2 \$PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	0.	-----	0.	-----	0.	-----
28.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
17.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
12.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
9.8	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
6.8	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
4.5	-----	62.	-----	0.	-----	0.
-----	1.	-----	0.	-----	0.	-----
3.6	-----	271.	-----	35.	-----	0.
-----	33.	-----	0.	-----	0.	-----
2.6	-----	356.	-----	116.	-----	2.
-----	48.	-----	1.	-----	0.	-----
0.0	-----	72.	-----	32.	-----	0.
-----	77.	-----	3.	-----	0.	-----
10.2	-----	43.	-----	37.	-----	0.
-----	58.	-----	2.	-----	0.	-----
8.4	-----	45.	-----	26.	-----	0.
-----	41.	-----	2.	-----	0.	-----
5.7	-----	144.	-----	19.	-----	0.
-----	40.	-----	3.	-----	0.	-----
3.4	-----	274.	-----	42.	-----	0.
-----	82.	-----	5.	-----	0.	-----
1.8	-----	320.	-----	77.	-----	1.
-----	105.	-----	6.	-----	0.	-----
1.3	-----	316.	-----	81.	-----	1.

2

AFF- 79
 JP-4(PET) VS JP-8(PET)
 1981, MAY 19-20

	CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SI
	TIME	TIME	BSCAT	BSCAT	AER.V	AER.V	AER.N	AER.N	AE
	DY HR.	(MIN)	10-4 M-1	10-4 M-1	UM3/CC	UM3/CC	PART/CC	PART/CC	UM
	1	610	-170	-----	-----	-----	-----	-----	--
	1	615	-165	0.2	0.2	1.	1.	784.	784.
	1	725	-95	-----	-----	-----	-----	-----	--
	1	835	-25	0.0	-----	-0.	-----	370.	-----
	1	845	-15	-----	0.0	-----	2.	-----	1.0E 05
	1	1005	65	0.0	-----	2.	-----	2.5E 04	-----
	1	1015	75	-----	0.0	-----	2.	-----	8.4E 04
	1	1105	125	0.0	-----	1.	-----	8.8E 04	-----
	1	1115	135	-----	0.0	-----	3.	-----	7.2E 04
	1	1205	185	0.0	-----	3.	-----	1.1E 05	-----
	1	1215	195	-----	0.1	-----	7.	-----	5.3E 04
	1	1305	245	0.1	-----	9.	-----	8.3E 04	-----
	1	1315	255	-----	0.3	-----	10.	-----	3.8E 04
	1	1405	305	1.0	-----	10.	-----	6.1E 04	-----
	1	1415	315	-----	1.8	-----	9.	-----	2.8E 04
	1	1505	365	2.2	-----	10.	-----	5.0E 04	-----
	1	1515	375	-----	4.2	-----	10.	-----	2.6E 04
	1	1605	425	3.8	-----	9.	-----	4.2E 04	-----
	1	1615	435	-----	5.5	-----	11.	-----	2.3E 04
600	2	720	1340	-----	-----	-----	-----	-----	--
	2	835	1415	0.2	-----	-1.	-----	1850.	-----
	2	845	1425	-----	0.3	-----	5.	-----	-461.
	2	1005	1505	0.3	-----	1.	-----	1.2E 04	-----
	2	1015	1515	-----	1.1	-----	9.	-----	4.9E 04
	2	1105	1565	0.4	-----	7.	-----	1.1E 04	-----
	2	1115	1575	-----	2.5	-----	13.	-----	4.3E 04
	2	1205	1625	1.0	-----	4.	-----	1.0E 04	-----
	2	1215	1635	-----	3.2	-----	20.	-----	3.5E 04
	2	1305	1685	1.2	-----	5.	-----	6673.	-----
	2	1315	1695	-----	4.0	-----	10.	-----	2.6E 04
	2	1405	1745	1.5	-----	3.	-----	5150.	-----
	2	1415	1755	-----	4.0	-----	8.	-----	1.8E 04
	2	1505	1805	1.7	-----	4.	-----	3638.	-----
	2	1515	1815	-----	2.7	-----	12.	-----	1.3E 04

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 METHANE PPM BK6800-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1
784.	784.	20.	20.	1.45	-----	-----
370.	-----	4.	-----	1.40	0.0379	-----
2.5E 04	1.0E 05	60.	274.	1.38	-----	-----
8.8E 04	8.4E 04	190.	262.	1.38	-----	-----
1.1E 05	7.2E 04	360.	293.	1.38	-----	-----
5.3E 04	5.3E 04	446.	-----	-----	-----	-----
8.3E 04	527.	-----	-----	1.39	-----	-----
3.8E 04	3.8E 04	529.	-----	-----	-----	-----
6.1E 04	683.	-----	-----	1.37	-----	-----
2.8E 04	2.8E 04	563.	-----	-----	-----	-----
5.0E 04	713.	-----	-----	1.39	0.0362	-----
2.6E 04	2.6E 04	561.	-----	-----	-----	-----
4.2E 04	697.	-----	-----	1.39	-----	-----
2.3E 04	2.3E 04	524.	-----	-----	-----	-----
1850.	-----	12.	-----	1.42	0.0344	-----
-461.	-----	78.	-----	-----	-----	-----
1.2E 04	75.	-----	-----	1.38	-----	-----
4.9E 04	4.9E 04	643.	-----	-----	-----	-----
1.1E 04	187.	-----	-----	1.38	-----	-----
4.3E 04	4.3E 04	783.	-----	-----	-----	-----
1.0E 04	169.	-----	-----	1.41	-----	-----
3.5E 04	3.5E 04	745.	-----	-----	-----	-----
6673.	169.	-----	-----	1.44	-----	-----
2.6E 04	2.6E 04	572.	-----	-----	-----	-----
5150.	138.	-----	-----	1.42	0.0350	-----
1.8E 04	1.8E 04	439.	-----	-----	-----	-----
3638.	110.	-----	-----	1.42	-----	-----
1.3E 04	1.3E 04	373.	-----	-----	-----	0.0010

2

AFF- 79
JP-4(PET) VS JP-8(PET)
1981, MAY 19-20

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C6 PPM VAR 3700	SIDE 1 N-C7 PPM VAR 3700	SIDE 1 MECYC-C6 PPM VAR 3700	SIDE 1 N-C8 PPM VAR 3700	SIDE 1 N-C9 PPM VAR 3700	SIDE 1 N-C10 PPM VAR 3700	SIDE 1 N-C1 PPM VAR 3700
1 725	-95	-----	-----	-----	-----	-----	-----	0.0
1 835	-25	0.1005	0.1258	0.0722	0.1043	0.0552	0.0323	---
1 1015	75	-----	-----	-----	-----	-----	-----	0.0
1 1105	125	0.0883	0.1111	0.0663	0.0971	0.0489	0.0303	---
1 1215	195	-----	-----	-----	-----	-----	-----	0.0
1 1305	245	0.0881	0.1107	0.0669	0.0969	0.0487	0.0299	---
1 1415	315	-----	-----	-----	-----	-----	-----	0.0
1 1505	365	0.0850	0.1036	0.0617	0.0892	0.0452	0.0275	---
1 1615	435	-----	-----	-----	-----	-----	-----	0.0
2 720	1340	0.0849	0.0980	0.0577	0.0836	0.0699	0.0272	---
2 845	1425	-----	-----	-----	-----	-----	-----	0.0
2 1005	1505	0.0846	0.1037	0.0605	0.0896	0.0446	0.0271	---
2 1115	1575	-----	-----	-----	-----	-----	-----	0.0
2 1205	1625	0.0826	0.1032	0.0584	0.0868	0.0436	0.0260	---
2 1315	1695	-----	-----	-----	-----	-----	-----	0.0
2 1405	1745	0.0946	0.1126	0.0596	0.0888	0.0435	0.0257	---
2 1515	1815	-----	-----	-----	-----	-----	-----	0.0

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

	SIDE 1 N-C9 PPM VAR 3700	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700	SIDE 1 N-C11 PPM VAR 3700	SIDE 2 N-C11 PPM VAR 3700	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700
1	-----	-----	0.0261	-----	0.0807	-----	0.0732
3	0.0552	0.0323	-----	0.0386	-----	0.0367	-----
00	-----	-----	0.0260	-----	0.0853	-----	0.0824
71	0.0489	0.0303	-----	0.0359	-----	0.0328	-----
69	0.0487	0.0299	-----	0.0357	-----	0.0324	-----
92	0.0452	0.0275	-----	0.0317	-----	0.0271	-----
36	0.0699	0.0272	-----	0.0318	-----	0.0320	-----
96	0.0446	0.0271	-----	0.0323	-----	0.0376	-----
68	0.0436	0.0260	-----	0.0309	-----	0.0261	-----
88	0.0435	0.0257	-----	0.0308	-----	0.0265	-----
	-----	-----	0.0214	-----	0.0651	-----	0.0572

2

AFF- 79
JP-4(PET) VS JP-8(PET)
1981, MAY 19-20

	CLOCK	ELAPSED TIME BY HR.	SIDE 1 N-C13 (MIN)	SIDE 2 N-C13 PPM	SIDE 1 N-C14 VAR 3700	SIDE 2 N-C14 PPM	SIDE 1 O-XYL VAR 3700	SIDE 1 M-XYL PPM	SIDE 1 C2B1 VAR 3700	
1	725	-95	-----	0.0552	-----	0.008	-----	-----	-----	
1	835	-25	0.0329	-----	0.024	-----	0.0175	0.0724	0.0	
1	1015	75	-----	0.0627	-----	0.010	-----	-----	-----	
1	1105	125	0.0253	-----	0.023	-----	0.0150	0.0669	0.0	
1	1215	195	-----	0.0559	-----	0.010	-----	-----	-----	
1	1305	245	0.0253	-----	0.019	-----	0.0150	0.0661	0.0	
1	1415	315	-----	0.0540	-----	0.009	-----	-----	-----	
1	1505	365	0.0207	-----	0.015	-----	0.0142	0.0609	0.0	
1	1615	435	-----	0.0531	-----	0.008	-----	-----	-----	
2	720	1340	0.0326	-----	0.024	-----	0.0169	0.0598	0.0	
2	845	1425	-----	0.0426	-----	0.029	-----	-----	-----	
2	1005	1505	0.0215	-----	0.017	-----	0.0155	0.0592	0.0	
2	1115	1575	-----	0.0440	-----	0.036	-----	-----	-----	
2	1205	1625	0.0206	-----	0.015	-----	0.0146	0.0563	0.0	
2	1315	1695	-----	0.0429	-----	0.031	-----	0.0141	0.0559	0.0
2	1405	1745	0.0202	-----	0.014	-----	0.025	-----	-----	
2	1515	1815	-----	0.0383	-----	-----	-----	-----	-----	

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

E 2	SIDE 1	SIDE 2					
14	O-XYL	M-XYL	C2BENZ	I-C3-BZ	N-C3-BZ	124TMEBZ	124TMEBZ
M	PPM						
3700	VAR 3700						
008	-----	-----	-----	-----	-----	-----	0.0095
--	0.0175	0.0724	0.0226	0.0030	0.0037	0.0226	-----
010	-----	-----	-----	-----	-----	-----	0.0081
--	0.0150	0.0669	0.0144	0.0029	0.0033	0.0198	-----
010	-----	-----	-----	-----	-----	-----	0.0067
--	0.0150	0.0661	0.0148	0.0029	0.0033	0.0182	-----
.009	-----	-----	-----	-----	-----	-----	0.0064
--	0.0142	0.0609	0.0140	0.0026	0.0033	0.0147	-----
.008	-----	-----	-----	-----	-----	-----	0.0059
--	0.0169	0.0598	0.0136	0.0049	0.0051	0.0148	-----
>029	-----	-----	-----	-----	-----	-----	0.0062
--	0.0155	0.0592	0.0140	0.0034	0.0038	0.0136	-----
.036	-----	-----	-----	-----	-----	-----	0.0052
--	0.0146	0.0563	0.0131	0.0031	0.0037	0.0120	-----
.031	-----	-----	-----	-----	-----	-----	0.0049
--	0.0141	0.0559	0.0142	0.0033	0.0036	0.0111	-----
.025	-----	-----	-----	-----	-----	-----	0.0046

2

AFF- 79
 JP-4(PET) VS JP-8(PET)
 1981, MAY 19-20

CLOCK DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		CO PPM	CO PPM	PAN PPM	PAN PPM	HCHO PPM CA	HCHO PPM CA	PART FART	PART FART	TSI-
1 615	-165	0.43	0.43	0.000	0.000	-----	-----	-----	-----	183
1 810	-50	-----	-----	-----	-----	0.000	0.000	0.000	0.000	-----
1 835	-25	0.47	-----	0.000	-----	-----	-----	-----	-----	-66
1 845	-15	-----	0.46	-----	0.000	-----	-----	-----	-----	-----
1 1005	65	0.45	-----	0.000	-----	-----	-----	-----	-----	2.4
1 1015	75	-----	0.46	-----	0.000	-----	-----	-----	-----	-----
1 1105	125	0.44	-----	0.001	-----	-----	-----	-----	-----	8.4
1 1115	135	-----	0.46	-----	0.000	-----	-----	-----	-----	-----
1 1200	180	-----	-----	-----	-----	0.009	0.002	-----	-----	-----
1 1205	185	0.42	-----	0.004	-----	-----	-----	-----	-----	8.1
1 1215	195	-----	0.46	-----	0.003	-----	-----	-----	-----	-----
1 1305	245	0.47	-----	0.012	-----	-----	-----	-----	-----	3.1
1 1315	255	-----	0.47	-----	0.008	-----	-----	-----	-----	-----
1 1405	305	0.50	-----	0.024	-----	-----	-----	-----	-----	501
1 1415	315	-----	0.50	-----	0.016	-----	-----	-----	-----	-----
1 1505	365	0.49	-----	0.036	-----	-----	-----	-----	-----	250
1 1515	375	-----	0.52	-----	0.028	-----	-----	-----	-----	-----
1 1605	425	0.53	-----	0.045	-----	-----	-----	-----	-----	167
1 1610	430	-----	-----	-----	-----	0.036	0.025	-----	-----	-----
1 1615	435	-----	0.52	-----	0.035	-----	-----	-----	-----	-----
2 810	1390	-----	-----	-----	-----	0.051	0.038	-----	-----	-----
2 835	1415	0.53	-----	0.037	-----	-----	-----	-----	-----	133
2 845	1425	-----	0.48	-----	0.031	-----	-----	-----	-----	-----
2 1005	1505	0.48	-----	0.043	-----	-----	-----	-----	-----	751
2 1015	1515	-----	0.54	-----	0.039	-----	-----	-----	-----	-----
2 1105	1565	0.54	-----	0.047	-----	-----	-----	-----	-----	-----
2 1115	1575	-----	0.56	-----	0.045	-----	-----	-----	-----	-----
2 1200	1620	-----	-----	-----	-----	0.049	0.046	-----	-----	-----
2 1205	1625	0.55	-----	0.049	-----	-----	-----	-----	-----	66
2 1215	1635	-----	0.58	-----	0.042	-----	-----	-----	-----	-----
2 1305	1685	0.63	-----	0.053	-----	-----	-----	-----	-----	-16
2 1315	1695	-----	0.62	-----	0.050	-----	-----	-----	-----	-----
2 1405	1745	0.62	-----	0.056	-----	-----	-----	-----	-----	16
2 1415	1755	-----	0.66	-----	0.048	-----	-----	-----	-----	-----
2 1505	1805	0.65	-----	0.065	-----	-----	-----	-----	-----	-50
2 1510	1810	-----	-----	-----	-----	0.070	0.060	-----	-----	-----
2 1515	1815	-----	0.60	-----	0.058	-----	-----	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

DE 2 AN M -3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023
000	-----	-----	1837.	1837.	-1218.	-1218.
---	0.000	0.000	-----	-----	-----	-----
---	-----	-----	-668.	-----	870.	-----
000	-----	-----	-----	9.0E 04	-----	1.1E 04
---	-----	-----	2.4E 04	-----	522.	-----
000	-----	-----	-----	6.4E 04	-----	1.6E 04
---	-----	-----	8.4E 04	-----	3828.	-----
000	-----	-----	-----	4.5E 04	-----	2.3E 04
---	0.009	0.002	-----	-----	-----	-----
---	-----	-----	8.1E 04	-----	2.4E 04	-----
003	-----	-----	-----	1.2E 04	-----	2.9E 04
---	-----	-----	3.1E 04	-----	4.0E 04	-----
008	-----	-----	-----	835.	-----	1.5E 04
---	-----	-----	5010.	-----	3.0E 04	-----
016	-----	-----	-----	-3674.	-----	3915.
---	-----	-----	2505.	-----	1.4E 04	-----
028	-----	-----	-----	334.	-----	609.
---	-----	-----	1670.	-----	5655.	-----
036	0.036	0.025	-----	-----	-----	-----
035	-----	-----	-----	1503.	-----	-609.
---	0.051	0.038	-----	-----	-----	-----
---	-----	-----	1336.	-----	-174.	-----
031	-----	-----	-----	-1336.	-----	174.
---	-----	-----	7515.	-----	3132.	-----
039	-----	-----	-----	1336.	-----	2.0E 04
---	-----	-----	0.	-----	4785.	-----
045	-----	-----	-----	-167.	-----	6264.
---	0.049	0.046	-----	-----	-----	-----
---	-----	-----	668.	-----	3219.	-----
042	-----	-----	-----	668.	-----	1914.
---	-----	-----	-167.	-----	696.	-----
050	-----	-----	-----	334.	-----	435.
---	-----	-----	167.	-----	0.	-----
048	-----	-----	-----	835.	-----	-261.
---	-----	-----	-501.	-----	174.	-----
070	0.070	0.060	-----	-----	-----	-----
058	-----	-----	-----	334.	-----	348.

2

AFF- 79
JP-4(PET) VS JP-8(PET)
1981, MAY 19-20

	CLOCK	ELAPSED TIME BY HR.	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SI PAR TSI
1	615	-165	-222.	-222.	337.	337.	49.	49.	
1	835	-25	222.	-----	-72.	-----	25.	-----	
1	845	-15	-----	1909.	-----	145.	-----	37.	--
1	1005	65	178.	-----	-96.	-----	25.	-----	
1	1015	75	-----	3019.	-----	265.	-----	-37.	--
1	1105	125	622.	-----	121.	-----	0.	-----	
1	1115	135	-----	4706.	-----	72.	-----	-49.	--
1	1205	185	4262.	-----	48.	-----	37.	-----	
1	1215	195	-----	1.2E 04	-----	482.	-----	-49.	--
1	1305	245	1.1E 04	-----	169.	-----	12.	-----	
1	1315	255	-----	2.1E 04	-----	410.	-----	0.	--
1	1405	305	2.6E 04	-----	410.	-----	62.	-----	
1	1415	315	-----	2.7E 04	-----	1060.	-----	12.	--
1	1505	365	3.3E 04	-----	795.	-----	0.	-----	
1	1515	375	-----	2.4E 04	-----	1856.	-----	0.	--
1	1605	425	3.3E 04	-----	1229.	-----	12.	-----	
1	1615	435	-----	1.9E 04	-----	2723.	-----	111.	--
2	835	1415	577.	-----	48.	-----	86.	-----	
2	845	1425	-----	311.	-----	265.	-----	62.	--
2	1005	1505	1243.	-----	289.	-----	37.	-----	
2	1015	1515	-----	2.7E 04	-----	651.	-----	12.	--
2	1105	1545	6438.	-----	313.	-----	-74.	-----	
2	1115	1575	-----	3.6E 04	-----	1518.	-----	-12.	--
2	1205	1625	6172.	-----	265.	-----	98.	-----	
2	1215	1635	-----	3.0E 04	-----	2097.	-----	-37.	--
2	1305	1685	5594.	-----	458.	-----	62.	-----	
2	1315	1695	-----	2.3E 04	-----	2627.	-----	25.	--
2	1405	1745	4573.	-----	193.	-----	197.	-----	
2	1415	1755	-----	1.5E 04	-----	2675.	-----	85.	--
2	1505	1805	3508.	-----	410.	-----	37.	-----	
2	1515	1815	-----	9724.	-----	2675.	-----	37.	--

----- NO DATA TAKEN

NOTES

A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.

403

12 NOV 1981
PAGE 9

SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
7.	49.	49.	0.	0.	0.	0.
--	25.	-----	-7.	-----	0.	-----
5.	-----	37.	-----	13.	-----	0.
--	25.	-----	0.	-----	7.	-----
5.	-----	-37.	-----	-7.	-----	0.
--	0.	-----	7.	-----	0.	-----
2.	-----	-49.	-----	13.	-----	0.
--	37.	-----	0.	-----	0.	-----
2.	-----	-49.	-----	27.	-----	7.
--	12.	-----	7.	-----	18.	-----
0.	-----	0.	-----	27.	-----	14.
--	62.	-----	7.	-----	11.	-----
0.	-----	12.	-----	7.	-----	7.
--	0.	-----	0.	-----	4.	-----
6.	-----	0.	-----	53.	-----	4.
--	12.	-----	0.	-----	0.	-----
3.	-----	111.	-----	0.	-----	11.
--	86.	-----	-20.	-----	-4.	-----
5.	-----	62.	-----	53.	-----	11.
--	37.	-----	0.	-----	0.	-----
1.	-----	12.	-----	20.	-----	4.
--	-74.	-----	-13.	-----	28.	-----
8.	-----	-12.	-----	53.	-----	4.
--	98.	-----	-7.	-----	7.	-----
7.	-----	-37.	-----	13.	-----	49.
--	62.	-----	20.	-----	11.	-----
27.	-----	25.	-----	20.	-----	4.
--	197.	-----	20.	-----	0.	-----
75.	-----	86.	-----	7.	-----	4.
--	37.	-----	0.	-----	11.	-----
75.	-----	37.	-----	-33.	-----	35.

ONITOR.

2

AFF- 80
JP8-SHALE/VARIABLE NOX
1981 MAY 21-22

DAY 1 (MAY 21)

0445: START FILL. WET: 7.0, DRY: 0.0, DEW PT.=6.1, R.H.=40%
0600: END FILL
0615: INJECTED 770 MICROLITERS JP-8 (SHALE) INTO BAG. 2 MIN.
N2 ONLY, THEN HEAT AT 250 DEGREES C FOR 30 MIN.
0650: MIX BAG.
0655: DIVIDE BAG
0704: 2.5 ML. NO₂ INJECTED INTO SIDE A.
0706: 9.0 ML. NO₂ INJECTED INTO SIDE A.
0716: 1.25 ML. NO₂ INJECTED INTO SIDE B.
0718: 4.5 ML. NO₂ INJECTED INTO SIDE B.
0720: MIX SIDES A AND B.
0900: UNCOVER BAG (T=0).
0910: WEATHER: HOT AND SUNNY.
1620: END SAMPLING, DAY 1
1630: COVER BAG.

DAY 2 (MAY 22)

0900: UNCOVER BAG
1520: RUN OVER.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	28(+/-3)	30(+/-3)
AVG.UV(MW/CM ²)	3.2(+/-1.1)	3.0(+/-0.6)

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.SEV	UNITS
T	DORIC-1	27.0	5.9	DEG C
T	DORIC-1	26.7	5.0	DEG C
UV RAD	EPFLEY-2	3.10	0.90	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.360	PPM
NO	B-NOX-1	0.178	PPM
NO ₂ -UNC	B-NOX-1	0.140	PPM
NO ₂ -UNC	B-NOX-1	0.069	PPM
THC	BK6300-1	22.00	PPMC
THC	BK6800-1	22.70	PPMC

AFF- 80
JP8-SHALE/VARIABLE NOX
1981 MAY 21,22

INSTRUMENTS USED		SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4900	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 COUNTS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID KCHO ANALYSIS
4131	EPFLEY-2	EPFLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 80
 JP8-SHALE/VARIABLE NOX
 1981 MAY 21,22

	CLOCK DY	ELAPSED HR.	SIDE 1 OZONE (MIN)	SIDE 2 OZONE PPM	SIDE 1 NO PPM	SIDE 2 NO PPM	SIDE 1 NO2-UNC PPM	SIDE 2 NO2-UNC PPM	SIDE 1 NOX- PPM
	TIME	TIME	D-1790	D-1790	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1
1	605	-175	0.000	0.000	0.006	0.006	0.000	0.000	0.
1	835	-25	0.010 A	-----	0.360	-----	0.140	-----	0.
1	845	-15	-----	0.004 A	-----	0.178	-----	0.069	-----
1	1005	65	0.019	-----	0.232	-----	0.232	-----	0.
1	1015	75	-----	0.036	-----	0.049	-----	0.177	-----
1	1105	125	0.041	-----	0.090	-----	0.353	-----	0.
1	1115	135	-----	0.175	-----	0.007	-----	0.178	-----
1	1205	185	0.149	-----	0.013	-----	0.387	-----	0.
1	1215	195	-----	0.338	-----	0.006	-----	0.129	-----
1	1305	245	0.353	-----	0.007	-----	0.321	-----	0.
1	1315	255	-----	0.476	-----	0.007	-----	0.092	-----
1	1405	305	0.551	-----	0.007	-----	0.235	-----	0.
1	1415	315	-----	0.467	-----	0.006	-----	0.081	-----
1	1505	365	0.652	-----	0.005	-----	0.169	-----	0.
1	1515	375	-----	0.481	-----	0.009	-----	0.080	-----
1	1605	425	0.660	-----	0.005	-----	0.132	-----	0.
1	1615	435	-----	0.460	-----	0.008	-----	0.079	-----
2	835	1415	0.445	-----	0.010	-----	0.063	-----	0.
2	845	1425	-----	0.338	-----	0.010	-----	0.042	-----
2	1005	1505	0.443	-----	0.009	-----	0.071	-----	0.
2	1015	1515	-----	0.313	-----	0.010	-----	0.051	-----
2	1105	1565	0.430	-----	0.009	-----	0.079	-----	0.
2	1115	1575	-----	0.312	-----	0.010	-----	0.059	-----
2	1205	1625	0.431	-----	0.010	-----	0.083	-----	0.
2	1215	1635	-----	0.318	-----	0.010	-----	0.060	-----
2	1305	1685	0.442	-----	0.010	-----	0.084	-----	0.
2	1315	1695	-----	0.326	-----	0.010	-----	0.062	-----
2	1405	1745	0.452	-----	0.011	-----	0.087	-----	0.
2	1415	1755	-----	0.327	-----	0.010	-----	0.062	-----
2	1505	1805	0.455	-----	0.010	-----	0.087	-----	0.
2	1515	1815	-----	0.323	-----	0.011	-----	0.064	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

SIDE 1 NO ₂ -UNC PPM B-NOX-1	SIDE 2 NO ₂ -UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0.000	0.000	0.008	0.008	0.78	0.78
0.140	-----	0.505	-----	22.00	-----
-----	0.069	-----	0.242	-----	22.70
0.232	-----	0.479	-----	21.50	-----
-----	0.177	-----	0.221	-----	22.40
0.353	-----	0.444	-----	21.20	-----
-----	0.178	-----	0.180	-----	21.40
0.387	-----	0.388	-----	20.40	-----
-----	0.129	-----	0.130	-----	20.10
0.321	-----	0.315	-----	19.30	-----
-----	0.092	-----	0.096	-----	19.90
0.235	-----	0.232	-----	17.70	-----
-----	0.081	-----	0.088	-----	19.00
0.169	-----	0.169	-----	17.10	-----
-----	0.080	-----	0.084	-----	18.80
0.132	-----	0.135	-----	16.70	-----
-----	0.079	-----	0.082	-----	18.70
0.063	-----	0.071	-----	16.20	-----
-----	0.042	-----	0.051	-----	18.30
0.071	-----	0.073	-----	15.60	-----
-----	0.051	-----	0.049	-----	18.10
0.079	-----	0.083	-----	15.60	-----
-----	0.059	-----	0.063	-----	17.50
0.083	-----	0.089	-----	15.30	-----
-----	0.060	-----	0.068	-----	17.40
0.084	-----	0.090	-----	15.40	-----
-----	0.062	-----	0.070	-----	17.60
0.087	-----	0.092	-----	14.90	-----
-----	0.062	-----	0.070	-----	17.50
0.087	-----	0.090	-----	14.90	-----
-----	0.064	-----	0.071	-----	17.10

AFF- 80
 JP8-SHALE/VARIABLE NOX
 1981 MAY 21,22

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 1
		T DEG C DORIC-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPELY-2	CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143	\$PART>.3 PART/CC CLIMET	PART/CC CLIMET	\$PART/CC CLIMET			
1 605	-175	12.2	12.2	-----	0.0	0.0	0.	0.	0.	0.	0.	
1 835	-25	18.8	-----	-----	17.0	-----	-----	-----	-----	0.	---	
1 845	-15	-----	21.2	-----	-----	16.0	-----	-----	-----	0.	---	
1 1005	65	23.0	-----	3.73	14.0	-----	-----	-----	-----	0.	---	
1 1015	75	-----	26.6	4.07	-----	13.5	-----	-----	-----	0.	---	
1 1105	125	27.8	-----	4.32	12.0	-----	-----	-----	-----	0.	---	
1 1115	135	-----	27.8	4.32	-----	12.0	-----	-----	-----	0.	---	
1 1205	185	30.3	-----	4.05	10.0	-----	-----	-----	-----	16.	---	
1 1215	195	-----	29.0	4.00	-----	9.5	-----	-----	-----	20.	---	
1 1305	245	31.6	-----	3.82	8.7	-----	-----	-----	-----	290.	---	
1 1315	255	-----	30.0	3.69	-----	8.1	-----	-----	-----	37.	---	
1 1405	305	32.2	-----	2.91	6.8	-----	-----	-----	-----	418.	---	
1 1415	315	-----	29.9	3.05	-----	6.1	-----	-----	-----	39.	---	
1 1505	365	30.3	-----	2.27	5.3	-----	-----	-----	-----	444.	---	
1 1515	375	-----	28.2	2.09	-----	4.4	-----	-----	-----	39.	---	
1 1605	425	25.8	-----	1.23	3.9	-----	-----	-----	-----	445.	---	
1 1615	435	-----	25.5	1.14	-----	3.1	-----	-----	-----	37.	---	
2 835	1415	20.7	-----	-----	0.1	-----	-----	-----	-----	137.	---	
2 845	1425	-----	21.0	-----	-----	0.1	-----	-----	-----	7.	---	
2 1005	1505	23.8	-----	2.45	1.4	-----	-----	-----	-----	104.	---	
2 1015	1515	-----	25.2	2.59	-----	2.9	-----	-----	-----	5.	---	
2 1105	1565	27.0	-----	3.59	1.1	-----	-----	-----	-----	110.	---	
2 1115	1575	-----	28.8	3.64	-----	1.9	-----	-----	-----	3.	---	
2 1205	1625	30.8	-----	3.59	0.7	-----	-----	-----	-----	230.	---	
2 1215	1635	-----	30.0	3.50	-----	1.2	-----	-----	-----	11.	---	
2 1305	1685	32.2	-----	3.46	0.7	-----	-----	-----	-----	294.	---	
2 1315	1695	-----	30.2	3.32	-----	0.9	-----	-----	-----	20.	---	
2 1405	1745	33.0	-----	2.96	0.4	-----	-----	-----	-----	342.	---	
2 1415	1755	-----	31.3	2.86	-----	0.5	-----	-----	-----	25.	---	
2 1505	1805	32.0	-----	2.00	0.3	-----	-----	-----	-----	361.	---	
2 1515	1815	-----	30.8	1.98	-----	0.3	-----	-----	-----	28.	---	

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

DE 1 DENS 3/CC -143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.0	0.	0.	0.	0.	0.	0.
7.0	-----	0.	-----	0.	-----	0.	-----
-----	16.0	-----	0.	-----	0.	-----	0.
4.0	-----	0.	-----	0.	-----	0.	-----
-----	13.5	-----	0.	-----	0.	-----	0.
2.0	-----	0.	-----	0.	-----	0.	-----
-----	12.0	-----	0.	-----	0.	-----	0.
0.0	-----	16.	-----	0.	-----	0.	-----
-----	9.5	-----	207.	-----	9.	-----	0.
8.7	-----	290.	-----	37.	-----	0.	-----
-----	8.1	-----	372.	-----	110.	-----	1.
6.8	-----	418.	-----	205.	-----	11.	-----
-----	6.1	-----	393.	-----	153.	-----	3.
5.3	-----	444.	-----	292.	-----	50.	-----
-----	4.4	-----	392.	-----	159.	-----	4.
3.9	-----	445.	-----	300.	-----	58.	-----
-----	3.1	-----	379.	-----	147.	-----	4.
0.1	-----	137.	-----	51.	-----	0.	-----
-----	0.1	-----	73.	-----	5.	-----	0.
1.4	-----	104.	-----	96.	-----	2.	-----
-----	2.9	-----	50.	-----	24.	-----	0.
1.1	-----	110.	-----	76.	-----	2.	-----
-----	1.9	-----	39.	-----	21.	-----	0.
0.7	-----	230.	-----	73.	-----	2.	-----
-----	1.2	-----	110.	-----	18.	-----	0.
0.7	-----	294.	-----	99.	-----	4.	-----
-----	0.9	-----	204.	-----	28.	-----	0.
0.4	-----	342.	-----	121.	-----	6.	-----
-----	0.5	-----	250.	-----	50.	-----	0.
0.3	-----	361.	-----	116.	-----	6.	-----
-----	0.3	-----	281.	-----	59.	-----	1.

5

AFF- 80
 JP8-SHALE/VARIABLE NOX
 1981 MAY 21,22

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
		BSCAT MRI-388	BSCAT MRI-388	AER.V UM3/CC	AER.V UM3/CC	PART/CC TSI-023	PART/CC TSI-023	AER.N TSI-023
1 605	-175	0.0	0.0	-1.	-1.	2134.	2134.	-7
1 730	-90	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.0	-----	1.	-----	3.9E 04	-----	101
1 845	-15	-----	0.0	-----	1.	-----	3.8E 04	-----
1 1005	65	0.0	-----	4.	-----	7.7E 04	-----	385
1 1015	75	-----	0.0	-----	5.	-----	7.4E 04	-----
1 1105	125	0.5	-----	8.	-----	6.3E 04	-----	666
1 1115	135	-----	0.8	-----	19.	-----	6.2E 04	-----
1 1205	185	3.6	-----	13.	-----	5.7E 04	-----	938
1 1215	195	-----	3.6	-----	16.	-----	5.6E 04	-----
1 1305	245	9.0	-----	16.	-----	5.2E 04	-----	1066
1 1315	255	-----	7.0	-----	17.	-----	5.3E 04	-----
1 1405	305	17.2	-----	19.	-----	5.2E 04	-----	1157
1 1415	315	-----	7.0	-----	15.	-----	4.3E 04	-----
1 1505	365	20.0	-----	21.	-----	4.2E 04	-----	1118
1 1515	375	-----	6.1	-----	14.	-----	3.4E 04	-----
1 1605	425	24.0	-----	18.	-----	3.5E 04	-----	931
1 1615	435	-----	5.0	-----	13.	-----	2.1E 04	-----
2 725	1345	-----	-----	-----	-----	-----	-----	-----
2 835	1415	1.3	-----	1.	-----	126.	-----	38
2 845	1425	-----	0.3	-----	2.	-----	145.	-----
2 1005	1505	1.5	-----	1.	-----	7932.	-----	122
2 1015	1515	-----	0.5	-----	2.	-----	1.4E 04	-----
2 1105	1565	1.5	-----	3.	-----	6929.	-----	189
2 1115	1575	-----	0.8	-----	2.	-----	1.2E 04	-----
2 1205	1625	2.8	-----	4.	-----	7611.	-----	183
2 1215	1635	-----	1.3	-----	4.	-----	8750.	-----
2 1305	1685	3.5	-----	4.	-----	5956.	-----	183
2 1315	1695	-----	1.6	-----	4.	-----	7532.	-----
2 1405	1745	4.5	-----	-2.	-----	4559.	-----	105
2 1415	1755	-----	2.0	-----	2.	-----	5061.	-----
2 1505	1805	4.6	-----	3.	-----	4170.	-----	129
2 1515	1815	-----	2.0	-----	13.	-----	3411.	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CL TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700
2	2134.	2134.	-7.	-7.	-----	-----
V	-----	-----	-----	-----	0.1457	-----
CC	3.9E 04	-----	102.	-----	-----	-----
23	-----	3.8E 04	-----	85.	-----	0.1472
	7.7E 04	-----	385.	-----	0.1434	-----
	-----	7.4E 04	-----	481.	-----	-----
	6.3E 04	-----	666.	-----	-----	-----
	-----	6.2E 04	-----	936.	-----	0.1348
	5.7E 04	-----	938.	-----	0.1364	-----
	-----	5.6E 04	-----	1115.	-----	-----
	5.2E 04	-----	1066.	-----	-----	-----
	-----	5.3E 04	-----	1091.	-----	0.1208
	5.2E 04	-----	1157.	-----	-----	-----
	-----	4.3E 04	-----	939.	-----	-----
	4.2E 04	-----	1118.	-----	0.1205	-----
	-----	3.4E 04	-----	781.	-----	-----
	3.5E 04	-----	931.	-----	-----	-----
	-----	2.1E 04	-----	624.	-----	0.1187
	-----	-----	-----	-----	0.1024	-----
	126.	-----	38.	-----	-----	-----
	-----	145.	-----	42.	-----	0.1157
	7932.	-----	122.	-----	0.1105	-----
	-----	1.4E 04	-----	166.	-----	-----
	6929.	-----	189.	-----	-----	-----
	-----	1.2E 04	-----	191.	-----	0.1112
	7611.	-----	183.	-----	0.1078	-----
	-----	8750.	-----	202.	-----	-----
	5956.	-----	183.	-----	-----	-----
	-----	7532.	-----	173.	-----	0.1091
	4559.	-----	105.	-----	0.1024	-----
	-----	5061.	-----	134.	-----	-----
	4170.	-----	129.	-----	-----	-----
	-----	3411.	-----	196.	-----	0.1061

2

AFF- 80
JP8-SHALE/VARIABLE NOX
1981 MAY 21,22

CLOCK TIME DY	ELAPSED TIME HR.	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SII
		N-C11 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C PP
1 730	-90	0.1548	-----	0.0970	-----	0.0460	-----	0.	-----	-----	-----	-----	0.	
1 845	-15	-----	0.1621	-----	0.1092	-----	0.0521	-----	-----	-----	-----	-----	---	
1 1005	65	0.1590	-----	0.1060	-----	0.0495	-----	0.	-----	-----	-----	-----	0.	
1 1115	135	-----	0.1489	-----	0.0967	-----	0.0464	-----	-----	-----	-----	-----	---	
1 1205	185	0.1525	-----	0.1002	-----	0.0476	-----	0.	-----	-----	-----	-----	---	
1 1315	255	-----	0.1414	-----	0.0929	-----	0.0461	-----	-----	-----	-----	-----	0.	
1 1505	365	0.1384	-----	0.0902	-----	0.0438	-----	0.	-----	-----	-----	-----	---	
1 1615	435	-----	0.1358	-----	0.0859	-----	0.0416	-----	-----	-----	-----	-----	---	
2 725	1345	0.1177	-----	0.0762	-----	0.0413	-----	0.	-----	-----	-----	-----	0.	
2 845	1425	-----	0.1313	-----	0.0814	-----	0.0377	-----	-----	-----	-----	-----	---	
2 1005	1505	0.1300	-----	0.0915	-----	0.0390	-----	0.	-----	-----	-----	-----	0.	
2 1115	1575	-----	0.1265	-----	0.0794	-----	0.0377	-----	-----	-----	-----	-----	---	
2 1205	1625	0.1275	-----	0.0777	-----	0.0366	-----	0.	-----	-----	-----	-----	0.	
2 1315	1695	-----	0.1264	-----	0.0757	-----	0.0363	-----	-----	-----	-----	-----	---	
2 1405	1745	0.1184	-----	0.0696	-----	0.0302	-----	0.	-----	-----	-----	-----	---	
2 1515	1815	-----	0.1206	-----	0.0699	-----	0.0310	-----	-----	-----	-----	-----	---	

----- NO DATA TAKEN

604

12 NOV 1981
PAGE 6

	SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 2 124TMEBZ PPM VAR 3700
2	0.0460	-----	0.021	-----	0.0275	-----
2	-----	0.0521	-----	0.024	-----	0.0273
1	0.0495	-----	0.021	-----	0.0265	-----
1	-----	0.0464	-----	0.020	-----	0.0229
1	0.0476	-----	0.019	-----	0.0225	-----
1	-----	0.0461	-----	0.021	-----	0.0195
1	0.0438	-----	0.020	-----	0.0187	-----
1	-----	0.0416	-----	0.019	-----	0.0183
1	0.0413	-----	0.022	-----	0.0154	-----
1	-----	0.0397	-----	0.019	-----	0.0138
1	0.0390	-----	0.018	-----	0.0159	-----
1	-----	0.0377	-----	0.017	-----	0.0167
1	0.0366	-----	0.015	-----	0.0146	-----
1	-----	0.0363	-----	0.016	-----	0.0152
1	0.0302	-----	0.012	-----	0.0126	-----
1	-----	0.0310	-----	0.013	-----	0.0145

Z

AFF- 80
 JP8-SHALE/VARIABLE NOX
 1981 MAY 21,22

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SII PART TSI-
		CO	PPM	CO	PPM	PAN	PPM	PAN	PPM	HCHO	PPM	HCHO	PPM	PART
		BK6800-1	BK6800-1	ECD-3	ECD-3	ECD-3	ECD-3	CA	CA					
1	605	-175	0.66	0.66		0.000		0.000		-----		-----		83
1	810	-50	-----	-----		-----		-----		0.004		0.002		---
1	835	-25	0.73	-----		0.000		-----		-----		-----		3.7
1	845	-15	-----	0.72		-----		0.000		-----		-----		---
1	1005	65	0.78	-----		0.002		-----		-----		-----		4.0
1	1015	75	-----	0.70		-----		0.006		-----		-----		---
1	1105	125	0.76	-----		0.010		-----		-----		-----		501
1	1115	135	-----	0.76		-----		0.027		-----		-----		---
1	1200	180	-----	-----		-----		-----		0.030		0.030		---
1	1205	185	0.75	-----		0.029		-----		-----		-----		83
1	1215	195	-----	0.80		-----		0.053		-----		-----		---
1	1305	245	0.77	-----		0.050		-----		-----		-----		-100
1	1315	255	-----	0.84		-----		0.083		-----		-----		---
1	1405	305	0.83	-----		0.082		-----		-----		-----		200
1	1415	315	-----	0.88		-----		0.089		-----		-----		---
1	1505	365	0.85	-----		0.116		-----		-----		-----		-100
1	1515	375	-----	0.84		-----		0.098		-----		-----		---
1	1605	425	0.91	-----		0.130		-----		-----		-----		50
1	1610	430	-----	-----		-----		-----		0.067		0.060		---
1	1615	435	-----	0.84		-----		0.104		-----		-----		---
2	810	1390	-----	-----		-----		-----		0.107		0.082		---
	835	1415	0.91	-----		0.057		-----		-----		-----		-133
	845	1425	-----	0.91		-----		0.040		-----		-----		---
	1005	1505	0.91	-----		0.064		-----		-----		-----		63
	1015	1515	-----	0.86		-----		0.045		-----		-----		---
	1105	1565	0.89	-----		0.072		-----		-----		-----		-100
	1115	1575	-----	0.96		-----		-----		-----		-----		---
	1200	1620	-----	-----		-----		-----		0.115		0.086		---
	1205	1625	0.99	-----		0.076		-----		-----		-----		50
	1215	1635	-----	0.92		-----		0.051		-----		-----		---
	1305	1685	1.05	-----		0.076		-----		-----		-----		16
	1315	1695	-----	1.05		-----		0.051		-----		-----		---
	1405	1745	1.08	-----		0.072		-----		-----		-----		---
	1415	1755	-----	1.07		-----		0.049		-----		-----		---
	1505	1805	1.11	-----		0.068		-----		-----		-----		16
	1510	1810	-----	-----		-----		-----		0.092		0.090		---
	1515	1815	-----	1.10		-----		0.048		-----		-----		---

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
HCHO	HCHO	PART.024	PART.024	PART.042	PART.042
PPM	PPM	PART/CC	PART/CC	PART/CC	PART/CC
CA	CA	TSI-023	TSI-023	TSI-023	TSI-023
0.004	0.002	835.	835.	1305.	1305.
-----	-----	-----	-----	-----	-----
-----	-----	3.7E 04	-----	1827.	-----
-----	-----	-----	3.5E 04	-----	2610.
-----	-----	4.0E 04	-----	2.9E 04	-----
-----	-----	-----	2.5E 04	-----	3.6E 04
-----	-----	5010.	-----	3.2E 04	-----
-----	-----	-----	-334.	-----	2.4E 04
0.030	0.030	-----	-----	-----	-----
-----	-----	835.	-----	1.2E 04	-----
-----	-----	-----	-3006.	-----	3915.
-----	-----	-1002.	-----	1479.	-----
-----	-----	-----	334.	-----	1218.
-----	-----	2004.	-----	1479.	-----
-----	-----	-----	-334.	-----	1218.
-----	-----	-1002.	-----	1044.	-----
-----	-----	-----	334.	-----	870.
-----	-----	501.	-----	1392.	-----
0.067	0.060	-----	-----	-----	-----
-----	-----	-----	-2839.	-----	-261.
0.107	0.082	-----	-----	-----	-----
-----	-----	-1336.	-----	435.	-----
-----	-----	-----	-668.	-----	261.
-----	-----	835.	-----	2523.	-----
-----	-----	-----	1336.	-----	5481.
-----	-----	-1002.	-----	696.	-----
-----	-----	-----	1002.	-----	957.
0.115	0.086	-----	-----	-----	-----
-----	-----	501.	-----	174.	-----
-----	-----	-----	-501.	-----	348.
-----	-----	167.	-----	-174.	-----
-----	-----	-----	668.	-----	-261.
-----	-----	0.	-----	0.	-----
-----	-----	-----	-167.	-----	-522.
-----	-----	167.	-----	174.	-----
0.092	0.090	-----	-----	-----	-----
-----	-----	-----	-501.	-----	174.

2

AFF- 80
 JP8-SHALE/VARIABLE NOX
 1981 MAY 21-22

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART. TSI-
1 405	-175	44.	44.	24.	24.	-51.	-61.	-
1 835	-25	622.	-----	24.	-----	123.	-----	-
1 845	-15	-----	44.	-----	0.	-----	0.	-
1 1005	65	7651.	-----	289.	-----	-25.	-----	-
1 1015	75	-----	1.2E 04	-----	193.	-----	0.	-
1 1105	125	2.5E 04	-----	651.	-----	25.	-----	-
1 1115	135	-----	3.8E 04	-----	940.	-----	0.	-
1 1205	185	4.3E 04	-----	1542.	-----	111.	-----	-
1 1215	195	-----	5.2E 04	-----	3012.	-----	49.	-
1 1305	245	4.7E 04	-----	3784.	-----	37.	-----	-
1 1315	255	-----	4.8E 04	-----	4193.	-----	0.	-
1 1405	305	4.2E 04	-----	7085.	-----	74.	-----	-
1 1415	315	-----	3.7E 04	-----	4531.	-----	111.	-
1 1505	365	3.3E 04	-----	8724.	-----	111.	-----	-
1 1515	375	-----	2.9E 04	-----	4338.	-----	0.	-
1 1605	425	2.5E 04	-----	8314.	-----	0.	-----	-
1 1615	435	-----	2.0E 04	-----	3904.	-----	111.	-
2 835	1415	533.	-----	482.	-----	12.	-----	-
2 845	1425	-----	311.	-----	120.	-----	111.	-
2 1005	1505	4129.	-----	506.	-----	-148.	-----	1
2 1015	1515	-----	6749.	-----	193.	-----	-25.	-
2 1105	1565	6216.	-----	868.	-----	135.	-----	-
2 1115	1575	-----	9191.	-----	578.	-----	0.	-
2 1205	1625	5639.	-----	1325.	-----	-62.	-----	-
2 1215	1635	-----	7948.	-----	940.	-----	12.	-
2 1305	1685	4307.	-----	1615.	-----	25.	-----	-
2 1315	1695	-----	5905.	-----	1301.	-----	-98.	-
2 1405	1745	3019.	-----	1566.	-----	-12.	-----	-
2 1415	1755	-----	4706.	-----	1060.	-----	0.	-
2 1505	1805	2442.	-----	1325.	-----	62.	-----	-
2 1515	1815	-----	2797.	-----	892.	-----	-37.	-

----- NO DATA TAKEN

NOTES

A PROBABLE INTERFERENCE BY FUEL ON OZONE READINGS.

12 NOV 1981
PAGE 8

DE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
T.133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
T/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
24.	-61.	-61.	-13.	-13.	0.	0.
---	123.	-----	-13.	-----	0.	-----
0.	-----	0.	-----	13.	-----	0.
---	-25.	-----	0.	-----	4.	-----
93.	-----	0.	-----	0.	-----	4.
---	25.	-----	-33.	-----	7.	-----
40.	-----	0.	-----	53.	-----	28.
---	111.	-----	0.	-----	4.	-----
12.	-----	49.	-----	0.	-----	4.
---	37.	-----	7.	-----	0.	-----
93.	-----	0.	-----	7.	-----	4.
---	74.	-----	7.	-----	0.	-----
31.	-----	111.	-----	0.	-----	0.
---	111.	-----	13.	-----	7.	-----
38.	-----	0.	-----	40.	-----	4.
---	0.	-----	27.	-----	4.	-----
04.	-----	111.	-----	40.	-----	7.
---	12.	-----	0.	-----	0.	-----
20.	-----	111.	-----	7.	-----	4.
---	-148.	-----	100.	-----	-14.	-----
93.	-----	-25.	-----	13.	-----	0.
---	135.	-----	20.	-----	-4.	-----
78.	-----	0.	-----	-20.	-----	0.
---	-62.	-----	33.	-----	0.	-----
40.	-----	12.	-----	0.	-----	4.
---	25.	-----	13.	-----	4.	-----
01.	-----	-98.	-----	13.	-----	4.
---	-12.	-----	7.	-----	-21.	-----
60.	-----	0.	-----	-20.	-----	4.
---	62.	-----	0.	-----	0.	-----
92.	-----	-37.	-----	40.	-----	46.

READINGS.

AFF- 81
JP-8 (SHALE) VARIABLE FUEL
1981, MAY 27

DAY 1 (MAY 27)

0445: START FILL. WET: 7.0; DRY: 0.0; DEW PT: 7.2C; R.H.=48%
0628: INJECT 5.0 ML NO2
0630: INJECT 18.0 ML NO
0638: DIVIDE BAG
0646: INJECTED SIMULTANEOUSLY 770 MICROLITERS JP-8(SHALE) INTO SIDE A
AND 385 MICROLITERS JP-8(SHALE) INTO SIDE B.
0900: UNCOVER BAG (T=0)
0905: WEATHER: LOW CLOUDS BUT CLEARING.
1200: SOME CLEARING, BUT NOT COMPLETELY.
1620: END SAMPLING, DAY 1
1630: COVER BAG.

DAY 2 (MAY 28)

0900: UNCOVER BAG
0930: WEATHER: SUNNY WITH SOME HAZE.
1520: RUN OVER, BAG DUMPED.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	28(+/-2)	31(+/-2)
AVG.UV(MW/CM2)	2.4(+/-0.8)	3.1(+/-0.5)

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	27.2	5.0	DEG C	SIDE 1
T	DORIC-1	27.1	4.5	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.71	0.79	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.362	PPM	SIDE 1
NO	B-NOX-1	0.362	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.128	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.128	PPM	SIDE 2
THC	BK6800-1	44.20	PPMC	SIDE 1
THC	BK6800-1	23.10	PPMC	SIDE 2

AFF- 81
JP-8 (SHALE) VARIABLE FUEL
1981, MAY 27

INSTRUMENTS USED			SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION	
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID	
2200	DMS-1	DIMETHYLSULFOLANE GC; FID	
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID	
2100	PN-1	RM-121 POROPAK-N GC; FID	
1790	D-1790	DASIBI 1790 OZONE MONITOR	
4600	B-NOX-1	RENDIX 8101BX NOX ANALYZER; SN300038-2	
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D	
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479	
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD	
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030	
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148	
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B	
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143	
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS	
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG	

413

AFF- 81
 JP-8 (SHALE) VARIABLE FUEL
 1981, MAY 27

	CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO ₂ -UNC PPM B-NOX-1	SIDE 2 NO ₂ -UNC PPM B-NOX-1	SIDE 1 NOX PPM B-NOX-1
1	635	-145	0.000	0.000	0.004	0.004	0.002	0.002	0.
1	835	-25	0.008 A	-----	0.362	-----	0.128	-----	0.
1	845	-15	-----	0.000	-----	0.362	-----	0.128	-----
1	1005	65	0.016	-----	0.227	-----	0.238	-----	0.
1	1015	75	-----	0.004	-----	0.203	-----	0.258	-----
1	1105	125	0.066	-----	0.060	-----	0.373	-----	0.
1	1115	135	-----	0.059	-----	0.048	-----	0.400	-----
1	1205	185	0.303	-----	0.009	-----	0.329	-----	0.
1	1215	195	-----	0.208	-----	0.011	-----	0.370	-----
1	1305	245	0.466	-----	0.006	-----	0.209	-----	0.
1	1315	255	-----	0.354	-----	0.009	-----	0.302	-----
1	1405	305	0.538	-----	0.009	-----	0.132	-----	0.
1	1415	315	-----	0.473	-----	0.009	-----	0.229	-----
1	1505	365	0.526	-----	0.007	-----	0.110	-----	0.
1	1515	375	-----	0.523	-----	0.009	-----	0.169	-----
1	1605	425	0.500	-----	0.008	-----	0.108	-----	0.
1	1615	435	-----	0.543	-----	0.010	-----	0.139	-----
2	835	1415	0.330	-----	0.007	-----	0.046	-----	0.
2	845	1425	-----	0.345	-----	0.010	-----	0.057	-----
2	1005	1505	0.312	-----	0.011	-----	0.057	-----	0.
2	1015	1515	-----	0.328	-----	0.012	-----	0.077	-----
2	1105	1565	0.312	-----	0.008	-----	0.070	-----	0.
2	1115	1575	-----	0.341	-----	0.010	-----	0.081	-----
2	1205	1625	0.328	-----	0.010	-----	0.070	-----	0.
2	1215	1635	-----	0.362	-----	0.011	-----	0.090	-----
2	1305	1685	0.346	-----	0.009	-----	0.072	-----	0.
2	1315	1695	-----	0.380	-----	0.011	-----	0.091	-----
2	1405	1745	0.357	-----	0.010	-----	0.071	-----	0.
2	1415	1755	-----	0.389	-----	0.012	-----	0.092	-----
2	1505	1805	0.362	-----	0.010	-----	0.071	-----	0.
2	1515	1815	-----	0.385	-----	0.011	-----	0.089	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
4	0.002	0.002	0.008	0.008	1.24	1.24
-	0.128	-----	0.494	-----	44.20	-----
2	-----	0.128	-----	0.494	-----	23.10
-	0.238	-----	0.477	-----	44.20	-----
3	-----	0.258	-----	0.477	-----	22.60
-	0.373	-----	0.430	-----	42.60	-----
8	-----	0.400	-----	0.438	-----	22.30
-	0.329	-----	0.322	-----	40.50	-----
11	-----	0.370	-----	0.362	-----	21.50
-	0.209	-----	0.207	-----	41.70	-----
9	-----	0.302	-----	0.298	-----	20.20
-	0.132	-----	0.132	-----	39.00	-----
9	-----	0.229	-----	0.227	-----	19.10
-	0.110	-----	0.111	-----	39.60	-----
9	-----	0.169	-----	0.170	-----	18.90
-	0.108	-----	0.110	-----	38.50	-----
10	-----	0.139	-----	0.141	-----	18.50
-	0.046	-----	0.050	-----	37.10	-----
10	-----	0.057	-----	0.062	-----	17.60
-	0.057	-----	0.062	-----	-----	-----
12	-----	0.077	-----	0.082	-----	-----
-	0.070	-----	0.073	-----	-----	-----
10	-----	0.081	-----	0.089	-----	-----
-	0.070	-----	0.075	-----	38.70	-----
11	-----	0.090	-----	0.095	-----	17.70
-	0.072	-----	0.078	-----	38.50	-----
11	-----	0.091	-----	0.098	-----	17.50
-	0.071	-----	0.078	-----	38.00	-----
12	-----	0.092	-----	0.099	-----	16.90
-	0.071	-----	0.078	-----	37.40	-----
11	-----	0.089	-----	0.095	-----	16.80

2

AFF- 81
 JP-8 (SHALE) VARIABLE FUEL
 1981, MAY 27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM ²	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC EPPLEY-2	CONDENS 10E3/CC CNC-143	PART/CC CLIMET	PART/CC CNC-143
1 605	-175	-----	-----	-----	0.0	0.0	0.	-----
1 635	-145	16.6	16.6	-----	-----	-----	-----	-----
1 835	-25	18.0	-----	-----	22.0	-----	0.	-----
1 845	-15	-----	18.7	-----	-----	44.0	-----	-----
1 1005	65	24.0	-----	2.63	14.0	-----	0.	-----
1 1015	75	-----	24.7	1.94	-----	24.0	-----	-----
1 1105	125	27.3	-----	3.91	12.5	-----	0.	-----
1 1115	135	-----	28.4	4.00	-----	16.0	-----	-----
1 1205	185	29.7	-----	2.96	10.5	-----	305.	-----
1 1215	195	-----	28.6	2.09	-----	14.0	-----	6
1 1305	245	28.5	-----	2.50	9.0	-----	449.	-----
1 1315	255	-----	28.1	2.54	-----	11.5	-----	28
1 1405	305	29.1	-----	2.36	7.5	-----	462.	-----
1 1415	315	-----	27.7	1.82	-----	9.0	-----	39
1 1505	365	26.6	-----	1.46	6.9	-----	462.	-----
1 1515	375	-----	26.2	1.82	-----	7.5	-----	42
1 1605	425	29.1	-----	1.46	5.2	-----	456.	-----
1 1615	435	-----	27.7	1.37	-----	5.6	-----	42
2 835	1415	21.2	-----	-----	0.0	-----	301.	-----
2 845	1425	-----	21.7	-----	-----	0.0	-----	26
2 1005	1505	26.9	-----	3.14	0.2	-----	255.	-----
2 1015	1515	-----	29.4	3.37	-----	0.6	-----	21
2 1105	1565	29.0	-----	3.46	0.3	-----	213.	-----
2 1115	1575	-----	30.3	3.46	-----	0.4	-----	21
2 1205	1625	31.0	-----	3.55	0.3	-----	222.	-----
2 1215	1635	-----	31.1	3.55	-----	0.3	-----	28
2 1305	1685	33.2	-----	3.46	0.3	-----	247.	-----
2 1315	1695	-----	31.6	3.41	-----	0.3	-----	31
2 1405	1745	33.4	-----	2.91	0.2	-----	241.	-----
2 1415	1755	-----	31.5	2.82	-----	0.0	-----	26
2 1505	1805	31.9	-----	2.36	0.0	-----	220.	-----
2 1515	1815	-----	30.8	2.23	-----	0.0	-----	19

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	-----	-----	-----	-----	-----	-----
44.0	0.	0.	0.	0.	0.	0.
-----	-----	-----	-----	-----	-----	-----
24.0	0.	0.	0.	0.	0.	0.
-----	-----	-----	-----	-----	-----	-----
16.0	0.	0.	0.	0.	0.	0.
-----	-----	-----	-----	-----	-----	-----
14.0	305.	45.	45.	0.	0.	0.
-----	61.	-----	-----	-----	-----	-----
11.5	449.	283.	283.	32.	42.	0.
-----	280.	-----	-----	-----	-----	-----
9.0	462.	350.	350.	153.	105.	3.
-----	398.	-----	-----	-----	-----	-----
7.5	462.	352.	352.	228.	108.	17.
-----	427.	-----	-----	-----	-----	-----
5.6	456.	333.	333.	87.	24.	-----
-----	428.	-----	-----	244.	-----	-----
-----	301.	78.	78.	2.	-----	-----
0.0	263.	46.	46.	0.	-----	-----
-----	255.	135.	135.	4.	-----	-----
0.6	210.	98.	98.	2.	-----	-----
-----	213.	191.	191.	10.	-----	-----
0.4	217.	124.	124.	4.	-----	-----
-----	222.	164.	164.	11.	-----	-----
0.3	282.	130.	130.	6.	-----	-----
-----	247.	139.	139.	12.	-----	-----
0.3	315.	129.	129.	7.	-----	-----
-----	241.	123.	123.	12.	-----	-----
0.0	267.	107.	107.	7.	-----	-----
-----	220.	117.	117.	10.	-----	-----
0.0	199.	103.	103.	5.	-----	-----

AFF- 81
JP-8 (SHALE) VARIABLE FUEL
1981, MAY 27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		BSCAT MRI-388	BSCAT MRI-388	AER.V UM3/CC	AER.V UM3/CC	PART/CC TSI-023	PART/CC TSI-023	AER.N TSI-023
1 605	-175	0.2	0.2	1.	1.	656.	656.	2
1 730	-90	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.2	-----	1.	-----	6.5E 04	-----	13
1 845	-15	-----	0.3	-----	7.	-----	2.1E 05	-----
1 1005	65	0.4	-----	5.	-----	7.7E 04	-----	46
1 1015	75	-----	0.5	-----	6.	-----	1.2E 05	-----
1 1105	125	2.0	-----	12.	-----	6.3E 04	-----	84
1 1115	135	-----	1.3	-----	12.	-----	8.5E 04	-----
1 1205	185	11.0	-----	24.	-----	6.7E 04	-----	142
1 1215	195	-----	3.0	-----	14.	-----	7.4E 04	-----
1 1305	245	26.0	-----	37.	-----	7.0E 04	-----	178
1 1315	255	-----	6.0	-----	22.	-----	6.8E 04	-----
1 1405	305	35.0	-----	32.	-----	6.6E 04	-----	175
1 1415	315	-----	9.0	-----	23.	-----	6.1E 04	-----
1 1505	365	36.0	-----	28.	-----	5.5E 04	-----	151
1 1515	375	-----	10.0	-----	22.	-----	5.5E 04	-----
1 1605	425	32.0	-----	25.	-----	4.2E 04	-----	127
1 1615	435	-----	7.0	-----	25.	-----	4.2E 04	-----
2 730	1350	-----	-----	-----	-----	-----	-----	-----
2 835	1415	4.0	-----	4.	-----	1685.	-----	9
2 845	1425	-----	1.8	-----	2.	-----	1618.	-----
2 1005	1505	3.0	-----	2.	-----	2703.	-----	8
2 1015	1515	-----	2.2	-----	12.	-----	2702.	-----
2 1105	1565	3.5	-----	2.	-----	2598.	-----	7
2 1115	1575	-----	2.4	-----	7.	-----	4313.	-----
2 1205	1625	3.2	-----	5.	-----	2903.	-----	11
2 1215	1635	-----	2.5	-----	8.	-----	2933.	-----
2 1305	1685	3.6	-----	1.	-----	3334.	-----	7
2 1315	1695	-----	2.4	-----	4.	-----	2018.	-----
2 1405	1745	3.5	-----	3.	-----	2212.	-----	9
2 1415	1755	-----	2.3	-----	2.	-----	2444.	-----
2 1505	1805	2.5	-----	2.	-----	117.	-----	7
2 1515	1815	-----	1.1	-----	5.	-----	1925.	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700
656.	656.	23.	23.	-----	-----
-----	-----	-----	-----	-----	0.1275
6.5E 04	-----	135.	-----	0.3061	-----
-----	2.1E 05	-----	757.	-----	-----
7.7E 04	-----	466.	-----	-----	-----
-----	1.2E 05	-----	653.	-----	0.1332
6.3E 04	-----	846.	-----	0.2989	-----
-----	8.5E 04	-----	929.	-----	-----
6.7E 04	-----	1421.	-----	-----	-----
-----	7.4E 04	-----	1218.	-----	0.1244
7.0E 04	-----	1787.	-----	0.2769	-----
-----	6.8E 04	-----	1360.	-----	-----
6.6E 04	-----	1754.	-----	-----	-----
-----	6.1E 04	-----	1368.	-----	-----
5.5E 04	-----	1511.	-----	0.2662	-----
5.5E 04	-----	1247.	-----	-----	-----
4.2E 04	-----	1272.	-----	-----	-----
-----	4.2E 04	-----	1148.	-----	0.1191
-----	-----	-----	-----	-----	0.1057
1685.	-----	98.	-----	0.2705	-----
-----	1618.	-----	68.	-----	-----
2703.	-----	85.	-----	-----	-----
-----	2702.	-----	178.	-----	0.1130
2598.	-----	77.	-----	0.2502	-----
-----	4313.	-----	158.	-----	-----
2903.	-----	111.	-----	-----	-----
-----	2933.	-----	174.	-----	0.1063
3334.	-----	74.	-----	-----	-----
-----	2018.	-----	122.	-----	-----
2212.	-----	93.	-----	0.2481	-----
-----	2444.	-----	96.	-----	-----
117.	-----	73.	-----	-----	-----
-----	1925.	-----	107.	-----	0.1029

2

AFF- 81
 JP-8 (SHALE) VARIABLE FUEL
 1981, MAY 27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE
		N-C11 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C13 PPM
1 730	-90	-----	0.1400	-----	0.0828	-----	0.0367	-----						
1 835	-25	0.3325	-----	0.2109	-----	0.0981	-----	0.						
1 1015	75	-----	0.1609	-----	0.1107	-----	0.0543	-----						
1 1105	125	0.3296	-----	0.2117	-----	0.0935	-----	0.						
1 1215	195	-----	0.1512	-----	0.1029	-----	0.0489	-----						
1 1305	245	0.3213	-----	0.2010	-----	0.0852	-----	0.						
1 1505	365	0.3068	-----	0.1949	-----	0.0892	-----	0.						
1 1615	435	-----	0.1455	-----	0.0996	-----	0.0514	-----						
2 730	1350	-----	0.1270	-----	0.0818	-----	0.0468	-----						
2 835	1415	0.2858	-----	0.1740	-----	0.0778	-----	0.						
2 1015	1515	-----	0.1357	-----	0.0951	-----	0.0497	-----						
2 1105	1565	0.2836	-----	0.1691	-----	0.0708	-----	0.						
2 1215	1635	-----	0.1331	-----	0.0869	-----	0.0447	-----						
2 1405	1745	0.2808	-----	0.1737	-----	0.0768	-----	0.						
2 1515	1815	-----	0.1260	-----	0.0821	-----	0.0425	-----						

----- NO DATA TAKEN

77

12 NOV 1981
PAGE 6

SIDE 1 N-C13 PPM AR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 2 124TMEBZ PPM VAR 3700
-----	0.0367	-----	0.015	-----	0.0281
0.0981	-----	0.041	-----	0.0583	-----
0.0935	-----	0.0543	-----	0.023	-----
-----	-----	0.031	-----	0.0533	-----
0.0852	-----	0.0489	-----	0.019	-----
0.0892	-----	-----	0.028	-----	0.0222
-----	-----	0.034	-----	0.0486	-----
-----	0.0514	-----	0.021	-----	0.0454
-----	-----	-----	-----	-----	-----
0.0778	0.0468	-----	0.031	-----	0.0183
-----	-----	0.033	-----	0.0425	-----
0.0708	0.0497	-----	0.021	-----	0.0194
-----	-----	0.023	-----	0.0406	-----
0.0768	0.0447	-----	0.019	-----	0.0173
-----	-----	0.031	-----	0.0382	-----
-----	0.0425	-----	0.019	-----	0.0147
-----	-----	-----	-----	-----	0.0132

2

AFF- 81
JP-8 (SHALE) VARIABLE FUEL
1981, MAY 27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SID PART TSI-
		CO PPM	BK6800-1	CO PPM	BK6800-1	PAN PPM	ECD-1	PAN PPM	ECD-1	HCHO PPM	CA	HCHO PPM	CA	
1 605	-175	-----		-----		-----		-----		-----		-----		16
1 635	-145	0.84		0.84		0.000		0.000		-----		-----		---
1 810	-50	-----		-----		-----		-----		0.007		0.000		---
1 835	-25	0.89		-----		0.001		-----		-----		-----		5.9
1 845	-15	-----		1.00		-----		0.000		-----		-----		---
1 1005	65	0.91		-----		0.002		-----		-----		-----		3.3
1 1015	75	-----		0.93		-----		0.002		-----		-----		---
1 1105	125	0.86		-----		0.011		-----		-----		-----		384
1 1115	135	-----		0.90		-----		0.012		-----		-----		---
1 1200	180	-----		-----		-----		-----		0.028		0.025		---
1 1205	185	0.96		-----		0.036		-----		-----		-----		16
1 1215	195	-----		0.96		-----		0.033		-----		-----		---
1 1305	245	0.98		-----		0.056		-----		-----		-----		183
1 1315	255	-----		1.01		-----		0.047		-----		-----		---
1 1405	305	0.96		-----		0.084		-----		-----		-----		100
1 1415	315	-----		1.05		-----		0.073		-----		-----		---
1 1505	365	1.02		-----		0.097		-----		-----		-----		183
1 1515	375	-----		1.02		-----		0.101		-----		-----		---
1 1605	425	1.08		-----		0.098		-----		-----		-----		150
1 1610	430	-----		-----		-----		-----		0.073		0.054		---
1 1615	435	-----		1.05		-----		0.108		-----		-----		---
2 810	1390	-----		-----		-----		-----		0.113		0.082		---
2 835	1415	1.05		-----		0.033		-----		-----		-----		-116
2 845	1425	-----		1.07		-----		0.041		-----		-----		---
2 1005	1505	-----		-----		0.039		-----		-----		-----		16
2 1015	1515	-----		-----		-----		0.048		-----		-----		---
2 1105	1565	-----		-----		0.043		-----		-----		-----		50
2 1115	1575	-----		-----		-----		0.053		-----		-----		---
2 1200	1620	-----		-----		-----		-----		0.117		0.097		---
2 1205	1625	1.27		-----		0.046		-----		-----		-----		16
2 1215	1635	-----		1.29		-----		0.061		-----		-----		---
2 1305	1685	1.34		-----		0.044		-----		-----		-----		100
2 1315	1695	-----		1.33		-----		0.054		-----		-----		---
2 1405	1745	1.39		-----		0.045		-----		-----		-----		83
2 1415	1755	-----		1.45		-----		0.057		-----		-----		---
2 1505	1805	1.44		-----		0.043		-----		-----		-----		-200
2 1510	1810	-----		-----		-----		-----		0.122		0.117		---
2 1515	1815	-----		1.44		-----		0.063		-----		-----		---

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	HCHO	HC40	PART,024	PART,024	PART,042	PART,042
	PPM	PPM	PART/CC	PART/CC	PART/CC	PART/CC
	CA	CA	TSI-023	TSI-023	TSI-023	TSI-023
2						
	-----	-----	167.	167.	261.	261.
0	-----	-----	-----	-----	-----	-----
-	0.007	0.000	-----	-----	-----	-----
-	-----	-----	5.9E 04	-----	4872.	-----
0	-----	-----	-----	1.5E 05	-----	4.8E 04
-	-----	-----	3.3E 04	-----	3.2E 04	-----
2	-----	-----	-----	5.3E 04	-----	4.8E 04
-	-----	-----	3841.	-----	2.4E 04	-----
2	-----	-----	-----	1.2E 04	-----	3.7E 04
-	0.028	0.025	-----	-----	-----	-----
-	-----	-----	167.	-----	3045.	-----
3	-----	-----	-----	1002.	-----	1.6E 04
-	-----	-----	1837.	-----	174.	-----
7	-----	-----	-----	835.	-----	5220.
-	-----	-----	1002.	-----	261.	-----
3	-----	-----	-----	-835.	-----	2262.
-	-----	-----	1837.	-----	-261.	-----
1	-----	-----	-----	2171.	-----	4263.
-	-----	-----	1503.	-----	-87.	-----
8	0.073	0.054	-----	-----	-----	-----
-	-----	-----	-----	501.	-----	1914.
-	0.113	0.082	-----	-----	-----	-----
-	-----	-----	-1169.	-----	174.	-----
1	-----	-----	-----	-668.	-----	435.
-	-----	-----	167.	-----	348.	-----
8	-----	-----	-----	0.	-----	0.
-	-----	-----	501.	-----	-87.	-----
3	-----	-----	-----	-167.	-----	87.
-	0.117	0.097	-----	-----	-----	-----
-	-----	-----	167.	-----	261.	-----
1	-----	-----	-----	-1002.	-----	-87.
-	-----	-----	1002.	-----	-87.	-----
4	-----	-----	-----	-1002.	-----	0.
-	-----	-----	835.	-----	-1044.	-----
7	-----	-----	-----	167.	-----	0.
-	-----	-----	-2004.	-----	174.	-----
3	0.122	0.117	-----	-----	0.	435.

2

AFF- 81
 JP-8 (SHALE) VARIABLE FUEL
 1981, MAY 27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART TSI-()
1 605	-175	133.	133.	48.	48.	37.	37.	
1 835	-25	1288.	-----	-289.	-----	123.	-----	-81
1 845	-15	-----	1.1E 04	-----	169.	-----	37.	---
1 1005	65	1.1E 04	-----	530.	-----	-25.	-----	11
1 1015	75	-----	1.7E 04	-----	-48.	-----	-61.	---
1 1105	125	3.5E 04	-----	1253.	-----	86.	-----	20
1 1115	135	-----	3.4E 04	-----	1253.	-----	49.	---
1 1205	185	5.8E 04	-----	5615.	-----	197.	-----	20
1 1215	195	-----	5.4E 04	-----	3012.	-----	86.	---
1 1305	245	5.4E 04	-----	1.3E 04	-----	148.	-----	-31
1 1315	255	-----	5.6E 04	-----	5398.	-----	37.	---
1 1405	305	5.0E 04	-----	1.5E 04	-----	234.	-----	0
1 1415	315	-----	5.2E 04	-----	7134.	-----	37.	---
1 1505	365	3.9E 04	-----	1.4E 04	-----	209.	-----	-27
1 1515	375	-----	4.0E 04	-----	8580.	-----	98.	---
1 1605	425	2.8E 04	-----	1.3E 04	-----	197.	-----	27
1 1615	435	-----	3.0E 04	-----	9062.	-----	184.	---
2 835	1415	1598.	-----	1133.	-----	-61.	-----	0
2 845	1425	-----	1199.	-----	578.	-----	74.	---
2 1005	1505	1154.	-----	1060.	-----	-37.	-----	7
2 1015	1515	-----	1421.	-----	1229.	-----	0.	---
2 1105	1565	1243.	-----	916.	-----	62.	-----	-47
2 1115	1575	-----	3197.	-----	1205.	-----	-37.	---
2 1205	1625	1598.	-----	819.	-----	37.	-----	7
2 1215	1635	-----	2753.	-----	1133.	-----	86.	---
2 1305	1685	1554.	-----	795.	-----	123.	-----	-60
2 1315	1695	-----	1776.	-----	1205.	-----	12.	---
2 1405	1745	1376.	-----	988.	-----	37.	-----	20
2 1415	1755	-----	1154.	-----	1060.	-----	49.	---
2 1505	1805	1066.	-----	819.	-----	61.	-----	0
2 1515	1815	-----	710.	-----	699.	-----	0.	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

SIDE 1 PART,237 PART/CC TSI-023	SIDE 2 PART,237 PART/CC TSI-023	SIDE 1 PART,422 PART/CC TSI-023	SIDE 2 PART,422 PART/CC TSI-023	SIDE 1 PART,750 PART/CC TSI-023	SIDE 2 PART,750 PART/CC TSI-023
37.	37.	7.	7.	4.	4.
123.	-----	-87.	-----	14.	-----
-----	37.	-----	13.	-----	4.
-25.	-----	13.	-----	0.	-----
-----	-61.	-----	0.	-----	0.
86.	-----	20.	-----	0.	-----
-----	49.	-----	27.	-----	0.
197.	-----	20.	-----	7.	-----
-----	86.	-----	53.	-----	-21.
148.	-----	-33.	-----	39.	-----
-----	37.	-----	27.	-----	7.
234.	-----	0.	-----	7.	-----
-----	37.	-----	53.	-----	0.
209.	-----	-27.	-----	7.	-----
-----	98.	-----	-7.	-----	11.
197.	-----	27.	-----	4.	-----
-----	184.	-----	93.	-----	11.
-61.	-----	0.	-----	11.	-----
-----	74.	-----	0.	-----	0.
-37.	-----	7.	-----	4.	-----
-----	0.	-----	7.	-----	46.
62.	-----	-47.	-----	11.	-----
-----	-37.	-----	7.	-----	21.
37.	-----	7.	-----	14.	-----
-----	86.	-----	33.	-----	18.
123.	-----	-60.	-----	7.	-----
-----	12.	-----	20.	-----	7.
37.	-----	20.	-----	0.	-----
-----	49.	-----	13.	-----	0.
61.	-----	0.	-----	0.	-----
-----	0.	-----	73.	-----	7.

2

AFF- 82
PROPENE/NOX CONDITIONING
1981 MAY 29

0725: FILL STARTED. WET: 7.0; DRY: 0.0; DEW PT: 8.8; R.H.= 51%
0830: INJECT 12.0 ML NO, 11.0 NO₂, 22.5 ML PROPENE
0900: UNCOVER BAG (T=0)
1400: RUN OVER; BAG DUMPED.

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	25.5	8.8	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO ₂ -UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1
1 850	-10	0.000	0.208	0.188	0.396	19.3
1 1400	300	0.432	0.010	0.260	0.254	31.7

----- NO DATA TAKEN

AFF- 83
NOX-AIR IRRADIATION
1981 JUNE 1

0830: START FILL. WET: 7.0; DRY: 0.0; DEW PT: 7.2C; R.H.=30%
1030: INJECTED 6.2 ML NO₂
1041: INJECTED 20.0 ML NO
1043: INJECTED 0.46 ML PROPENE AND 0.46 ML PROPANE
1110: UNCOVER BAG (T=0)
1320: RUN OVER; BAG DUMPED.

RESULTS:

CALC. AVG. OH = 30.8 * D LN(PROPANE/PROPENE)/DT = 0.045 PPT

CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂) = 0.11 PPB/MIN
-D(NO)/DT = 0.33 PPB/MIN

T=0 AT 1110 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	31.3	2.7	DEG C
UV RAD	EPPLEY	3.92	0.32	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.410	PPM
NO ₂ -UNC	B-NOX-1	0.130	PPM
PROPANE	DMS-1	0.0112	PPM
PROPENE	DMS-1	0.0094	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	0-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038--2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 83
 NOX-AIR IRRADIATION
 1981 JUNE 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3
1 1055	-15	0.000	0.410	0.130	0.540	0.0111	0.0100	---
1 1110	0	-----	-----	-----	-----	0.0112	0.0094	0.3
1 1125	15	0.003	0.420	0.138	0.536	0.0113	0.0090	0.4
1 1140	30	0.003	0.417	0.139	0.535	0.0114	0.0090	0.4
1 1155	45	0.003	0.413	0.141	0.534	0.0113	0.0088	0.4
1 1210	60	0.004	0.408	0.144	0.530	0.0112	0.0085	0.4
1 1225	75	0.004	0.403	0.148	0.528	0.0113	0.0082	0.5
1 1240	90	0.003	0.400	0.149	0.530	0.0105	0.0077	0.5
1 1255	105	0.004	0.390	0.152	0.537	0.0106	0.0073	0.5
1 1310	120	0.004	0.386	0.154	0.535	0.0101	0.0070	0.5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	ETHANE PPM PN-1	ACETYLEN PPM DMS-1	ACETYLEN PPM PN-1	I-C4 PPM DMS-1	N-BUTANE PPM DMS-1	1-C4= PPM DMS-1	I-C PP DMS
1 1055	-15	0.0042	0.0018	0.0018	0.0011	0.0011	0.0002	0.0
1 1102	-8	-----	-----	-----	-----	-----	-----	---
1 1125	15	-----	-----	-----	-----	-----	-----	---
1 1140	30	-----	-----	-----	-----	-----	-----	---
1 1155	45	-----	-----	-----	-----	-----	-----	---
1 1210	60	-----	-----	-----	-----	-----	-----	---
1 1225	75	-----	-----	-----	-----	-----	-----	---
1 1240	90	-----	-----	-----	-----	-----	-----	---
1 1255	105	-----	-----	-----	-----	-----	-----	---
1 1310	120	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

422

12 NOV 1981
PAGE 2

ROFANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	THC PPMC BK6800-1	ETHENE PPM PN-1
0.0111	0.0100	-----	26.4	-----	1.48	0.0020
0.0112	0.0094	0.3830	-----	-----	-----	-----
0.0113	0.0090	0.4330	28.7	4.09	1.58	-----
0.0114	0.0090	0.4370	29.5	4.09	1.39	-----
0.0113	0.0088	0.4660	31.4	3.46	1.38	-----
0.0112	0.0085	0.4810	31.5	4.14	1.41	-----
0.0113	0.0082	0.5280	32.5	4.27	1.43	-----
0.0105	0.0077	0.5210	33.9	4.09	1.47	-----
0.0106	0.0073	0.5800	33.7	3.78	1.47	-----
0.0101	0.0070	0.5720	34.3	3.46	1.41	-----
-BUTANE PPM DMS-1	1-C4=	I-C4=	CO PPM DMS-1	HCHO PPM CA	ACETALD PPM 10'C-600	
0.0011	0.0002	0.0001	1.17	-----	0.0051	
-----	-----	-----	-----	0.013	-----	
-----	-----	-----	1.50	-----	-----	
-----	-----	-----	1.00	-----	-----	
-----	-----	-----	1.17	-----	-----	
-----	-----	-----	1.18	-----	-----	
-----	-----	-----	1.20	-----	-----	
-----	-----	-----	1.22	-----	-----	
-----	-----	-----	1.20	-----	-----	
-----	-----	-----	1.18	0.010	0.0080	

2

AFF- 84
JP-8(PET) VS N-BUTANE
1981 JUNE 2

0445: START FILL. WET: 7.0; DRY: 0.0; DEW PT: 6.8C; R.H.=43%
630: INJECTED 5.0 ML NO₂
0632: INJECTED 18.0 ML NO
0638: DIVIDE BAG
0644: INJECTED 385 MICROLITERS OF JP-8(PET) INTO SIDE A.
0707: INJECTED 125 ML N-BUTANE INTO SIDE B.
0900: UNCOVER BAG (T=0)
0910: WEATHER: LOW CLOUDS, SOME FOG, BUT CLEARING
1300: SUN IS COMING OUT.
1620: RUN OVER; BAG DUMPED.

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	25.3	5.3	DEG C	SIDE 1
T	DORIC-1	24.8	4.6	DEG C	SIDE 2
UV RAD	EFFLEY-2	2.24	0.86	MW/CM ²	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.369	PPM	SIDE 1
NO	B-NOX-1	0.372	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.125	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.127	PPM	SIDE 2
THC	BK6800-1	19.30	PPMC	SIDE 1
THC	BK6800-1	31.70	PPMC	SIDE 2
N-C4	DMS-1	5.1940	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EFFLEY-2	EFFLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 84
 JP-8(PET) VS N-BUTANE
 1981 JUNE 2

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX-1 PPM
1 605	-175	0.000	0.000	0.002	0.002	0.002	0.002	0.002
1 735	-85	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.023 A	-----	0.369	-----	0.125	-----	0.1
1 845	-15	-----	0.000	-----	0.372	-----	0.127	-----
1 1005	65	0.015	-----	0.328	-----	0.161	-----	0.1
1 1015	75	-----	0.000	-----	0.323	-----	0.178	-----
1 1105	125	0.025	-----	0.291	-----	0.189	-----	0.1
1 1115	135	-----	0.000	-----	0.282	-----	0.215	-----
1 1205	185	0.020	-----	0.220	-----	0.242	-----	0.1
1 1215	195	-----	0.000	-----	0.228	-----	0.271	-----
1 1305	245	0.034	-----	0.121	-----	0.327	-----	0.1
1 1315	255	-----	0.005	-----	0.160	-----	0.330	-----
1 1405	305	0.087	-----	0.032	-----	0.390	-----	0.1
1 1415	315	-----	0.013	-----	0.101	-----	0.393	-----
1 1505	365	0.170	-----	0.011	-----	0.370	-----	0.1
1 1515	375	-----	0.024	-----	0.062	-----	0.436	-----
1 1605	425	0.240	-----	0.009	-----	0.329	-----	0.1
1 1615	435	-----	0.028	-----	0.040	-----	0.451	-----

----- NO DATA TAKEN

424

12 NOV 1981
PAGE 2

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NCX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	SIDE 2 N-C4 PPM DMS-1
0.002	0.002	0.002	0.002	-----	-----	0.0007
-----	-----	-----	-----	-----	-----	0.0013
0.125	-----	0.500	-----	19.30	-----	-----
-----	0.127	-----	0.502	-----	31.70	5.194
0.161	-----	0.500	-----	16.90	-----	-----
-----	0.178	-----	0.505	-----	33.30	3.938
0.189	-----	0.490	-----	19.10	-----	-----
-----	0.215	-----	0.505	-----	31.40	4.837
0.242	-----	0.480	-----	19.00	-----	-----
-----	0.271	-----	0.505	-----	31.40	3.938
0.327	-----	0.451	-----	18.80	-----	-----
-----	0.330	-----	0.500	-----	31.20	5.310
0.390	-----	0.411	-----	18.50	-----	-----
-----	0.393	-----	0.494	-----	31.00	5.256
0.370	-----	0.369	-----	17.80	-----	-----
-----	0.436	-----	0.490	-----	31.00	4.454
0.329	-----	0.327	-----	17.30	-----	-----
-----	0.451	-----	0.483	-----	31.00	-----

2

AFF- 84
JP-8(PET) VS N-BUTANE
1981 JUNE 2

CLOCK DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>,3 PART/CC CLIMET	SIDE 1 #PART>,3 PART/CC CL
1 605	-175	16.7	16.7	-----	0.0	0.0	0.	-----
1 835	-25	19.7	-----	-----	9.3	-----	0.	-----
1 845	-15	-----	19.7	-----	-----	0.0	-----	-----
1 1005	65	21.6	-----	1.00	18.8	-----	0.	-----
1 1015	75	-----	21.7	1.18	-----	0.0	-----	-----
1 1105	125	22.6	-----	1.67	13.7	-----	0.	-----
1 1115	135	-----	24.2	2.09	-----	0.0	-----	-----
1 1205	185	26.0	-----	3.00	10.4	-----	0.	-----
1 1215	195	-----	25.8	3.00	-----	0.0	-----	-----
1 1305	245	29.6	-----	3.46	8.8	-----	0.	-----
1 1315	255	-----	28.0	3.19	-----	0.0	-----	-----
1 1405	305	31.2	-----	3.00	6.8	-----	79.	-----
1 1415	315	-----	30.2	2.86	-----	0.0	-----	-----
1 1505	365	31.1	-----	2.27	5.3	-----	270.	-----
1 1515	375	-----	29.2	2.14	-----	0.0	-----	-----
1 1605	425	23.9	-----	1.28	4.1	-----	365.	-----
1 1615	435	-----	27.6	1.18	-----	0.0	-----	-----

----- NO DATA TAKEN

125

12 NOV 1981
PAGE 3

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	0.	-----	0.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	79.	-----	0.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	270.	-----	37.	-----	0.	-----
0.0	-----	0.	-----	0.	-----	0.
-----	365.	-----	126.	-----	2.	-----
0.0	-----	1.	-----	0.	-----	0.

2

AFF- 84
JP-8(PET) VS N-BUTANE
1981 JUNE 2

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	S
		BSCAT	BSCAT	AER.V	AER.V	AER.N	AER.N	A
		10-4 M-1	10-4 M-1	UM3/CC	UM3/CC	PART/CC	PART/CC	U
1 605	-175	0.0	0.0	0.	0.	-51.	-51.	
1 735	-85	-----	-----	-----	-----	-----	-----	
1 835	-25	0.2	-----	2.	-----	3.8E 04	-----	
1 845	-15	-----	0.3	-----	1.	-----	722.	
1 1005	65	0.3	-----	3.	-----	3.4E 04	-----	
1 1015	75	-----	0.6	-----	3.	-----	166.	
1 1105	125	0.4	-----	7.	-----	4.4E 04	-----	
1 1115	135	-----	0.7	-----	1.	-----	51.	
1 1205	185	0.7	-----	5.	-----	5.2E 04	-----	
1 1215	195	-----	0.7	-----	2.	-----	-193.	
1 1305	245	1.4	-----	9.	-----	4.4E 04	-----	
1 1315	255	-----	1.1	-----	1.	-----	183.	
1 1405	305	4.0	-----	7.	-----	3.7E 04	-----	
1 1415	315	-----	1.4	-----	1.	-----	-74.	
1 1505	365	6.0	-----	12.	-----	3.2E 04	-----	
1 1515	375	-----	1.3	-----	2.	-----	363.	
1 1605	425	11.0	-----	15.	-----	3.3E 04	-----	
1 1615	435	-----	1.3	-----	-1.	-----	197.	

----- NO DATA TAKEN

426

12 NOV 1981
PAGE 4

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 METHANE PPM BK6800-1	SIDE 1 N-C10 PPM VAR 3700	SIDE 1 N-C11 PPM VAR 3700
-51.	-51.	5.	5.	-----	-----	-----
3.8E 04	-----	139.	-----	1.52	0.0250	0.0827
-----	722.	-----	15.	-----	-----	-----
3.4E 04	-----	165.	-----	1.51	0.0243	0.0762
-----	166.	-----	30.	-----	-----	-----
4.4E 04	-----	257.	-----	1.50	0.0243	0.0781
-----	51.	-----	13.	-----	-----	-----
5.2E 04	-----	331.	-----	1.51	0.0242	0.0784
-----	-193.	-----	20.	-----	-----	-----
4.4E 04	-----	485.	-----	1.50	-----	-----
-----	183.	-----	18.	-----	-----	-----
3.7E 04	-----	596.	-----	1.51	0.0232	0.0749
-----	-74.	-----	19.	-----	-----	-----
3.2E 04	-----	695.	-----	1.49	0.0223	0.0726
-----	363.	-----	27.	-----	-----	-----
3.3E 04	-----	710.	-----	1.50	0.0219	0.0703
-----	197.	-----	-11.	-----	-----	-----

J

AFF- 84
JP-8(PET) VS N-BUTANE
1981 JUNE 2

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C12 PPM	SIDE 1 N-C13 PPM	SIDE 1 N-C14 PPM	SIDE 1 124TMEBZ PPM	SIDE 1 CO PPM	SIDE 2 CO PPM	SID PA PP ECD
		VAR 3700	VAR 3700	VAR 3700	VAR 3700	BK6800-1	BK6800-1	
1 605	-175	-----	-----	-----	-----	-----	-----	0.
1 735	-85	0.0728	0.0558	0.010	0.0112	-----	-----	---
1 810	-50	-----	-----	-----	-----	-----	-----	---
1 835	-25	-----	-----	-----	-----	0.76	-----	0.
1 845	-15	-----	-----	-----	-----	-----	0.76	---
1 1005	65	0.0712	0.0522	-----	0.0082	0.60	-----	0.
1 1015	75	-----	-----	-----	-----	-----	0.58	---
1 1105	125	0.0742	0.0535	0.008	0.0075	0.66	-----	0.
1 1115	135	-----	-----	-----	-----	-----	0.72	---
1 1200	180	-----	-----	-----	-----	-----	-----	---
1 1205	185	0.0743	0.0531	-----	0.0070	0.64	-----	0.
1 1215	195	-----	-----	-----	-----	-----	0.60	---
1 1305	245	-----	-----	-----	-----	0.64	-----	0.
1 1315	255	-----	-----	-----	-----	-----	0.60	---
1 1405	305	0.0737	0.0587	0.008	0.0063	0.67	-----	0.
1 1415	315	-----	-----	-----	-----	-----	0.65	---
1 1505	365	0.0690	0.0492	-----	0.0057	0.69	-----	0.
1 1515	375	-----	-----	-----	-----	-----	0.62	---
1 1605	425	0.0663	0.0475	-----	0.0054	0.72	-----	0.
1 1610	430	-----	-----	-----	-----	-----	-----	---
1 1615	435	-----	-----	-----	-----	-----	0.69	---

----- NO DATA TAKEN

12 NOV 1981

PAGE 5

1 EBZ	SIDE 1 CO PPM	SIDE 2 CO PPM	SIDE 1 PAN PPM	SIDE 2 PAN PPM	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 2 ACETALD PPM 10'C-600
000	BK6800-1	BK6800-1	ECD-3	ECD-3			
12	-----	-----	0.000	0.000	-----	-----	0.0012
82	0.76	-----	0.000	-----	0.015	0.000	-----
75	0.60	-----	0.001	-----	-----	-----	-----
70	0.58	-----	0.002	-----	-----	-----	-----
63	0.66	-----	0.001	-----	-----	-----	-----
57	0.72	-----	0.005	-----	0.004	0.002	-----
54	0.64	-----	0.002	-----	-----	-----	-----
54	0.60	-----	0.008	-----	-----	-----	-----
57	0.64	-----	0.005	-----	-----	-----	-----
57	0.60	-----	0.010	-----	-----	-----	-----
63	0.67	-----	0.010	-----	-----	-----	-----
57	0.66	-----	0.015	-----	-----	-----	-----
57	0.69	-----	0.022	-----	-----	-----	-----
54	0.62	-----	0.019	-----	-----	-----	-----
54	0.72	-----	0.029	-----	0.031	0.008	-----
	0.69	-----	0.021	-----	-----	-----	0.0594 B

2

AFF- 84
JP-8(PET) VS N-BUTANE
1981 JUNE 2

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.	PART.	PART.
1 605	-175	501.	501.	-870.	870.	222.	222.	9.	9.	9.
1 835	-25	2.8E 04	-----	7917.	-----	1865.	-----	9.	9.	9.
1 845	-15	-----	835.	-----	-174.	-----	44.	-----	-----	-----
1 1005	65	1.9E 04	-----	1.2E 04	-----	2975.	-----	16.	-----	16.
1 1015	75	-----	0.	-----	174.	-----	-39.	-----	-----	-----
1 1105	125	2.6E 04	-----	1.3E 04	-----	4973.	-----	-----	-----	-----
1 1115	135	-----	0.	-----	174.	-----	0.	-----	-----	-----
1 1205	185	2.8E 04	-----	1.4E 04	-----	9502.	-----	14.	-----	14.
1 1215	195	-----	-334.	-----	87.	-----	0.	-----	-----	-----
1 1305	245	7853.	-----	1.6E 04	-----	1.7E 04	-----	65.	-----	65.
1 1315	255	-----	167.	-----	0.	-----	-89.	-----	-----	-----
1 1405	305	334.	-----	7830.	-----	2.7E 04	-----	168.	-----	168.
1 1415	315	-----	0.	-----	-87.	-----	-44.	-----	-----	-----
1 1505	365	-1503.	-----	1566.	-----	3.0E 04	-----	279.	-----	279.
1 1515	375	-----	501.	-----	0.	-----	-311.	-----	-----	-----
1 1605	425	5678.	-----	-1392.	-----	2.4E 04	-----	443.	-----	443.
1 1615	435	-----	167.	-----	87.	-----	89.	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023
222.	222.	96.	96.	0.	0.
1865.	-----	96.	-----	0.	-----
-----	44.	-----	0.	-----	0.
2975.	-----	169.	-----	-98.	-----
-----	-89.	-----	72.	-----	-12.
4973.	-----	0.	-----	-37.	-----
-----	0.	-----	-217.	-----	74.
9502.	-----	145.	-----	-12.	-----
-----	0.	-----	0.	-----	37.
1.7E 04	-----	651.	-----	49.	-----
-----	-89.	-----	96.	-----	-25.
2.7E 04	-----	1687.	-----	12.	-----
-----	-44.	-----	24.	-----	0.
3.0E 04	-----	2796.	-----	-37.	-----
-----	-311.	-----	120.	-----	12.
2.4E 04	-----	4483.	-----	-37.	-----
-----	89.	-----	-145.	-----	12.

2

AFF- 84
JP-8(PET) VS N-BUTANE
1981 JUNE 2

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART,422 PART/CC TSI-023	SIDE 2 PART,422 PART/CC TSI-023	SIDE 1 PART,750 PART/CC TSI-023	SIDE 2 PART,750 PART/CC TSI-023
		PART,422 PART/CC TSI-023	PART,422 PART/CC TSI-023	PART,750 PART/CC TSI-023	PART,750 PART/CC TSI-023
1 605	-175	0.	0.	0.	0.
1 835	-25	13.	-----	0.	-----
1 845	-15	-----	13.	-----	4.
1 1005	65	27.	-----	4.	-----
1 1015	75	-----	7.	-----	14.
1 1105	125	60.	-----	14.	-----
1 1115	135	-----	20.	-----	0.
1 1205	185	53.	-----	0.	-----
1 1215	195	-----	13.	-----	4.
1 1305	245	0.	-----	18.	-----
1 1315	255	-----	33.	-----	0.
1 1405	305	~33.	-----	0.	-----
1 1415	315	-----	33.	-----	0.
1 1505	365	7.	-----	7.	-----
1 1515	375	-----	40.	-----	0.
1 1605	425	33.	-----	14.	-----
1 1615	435	-----	-13.	-----	0.

----- NO DATA TAKEN

NOTES

- A PROBABLE INTERFERENCE BY FUEL ON OZONE MONITOR.
B ESTIMATED BASELINE

AFF- 85
PROPENE-NOX CONDITIONING
1981, JUNE 3

0600: START FILL. WET:7.0; DRY: 0.0; DEW PT: 5.0C; R.H.=30%
0802: INJECTED 11.0 ML NO2
0804: INJECTED 12.0 ML NO
0806: INJECTED 22.5 ML PROPENE
0900: UNCOVER BAG
1400: RUN OVER; BAG DUMPED AND PURGED.

T=0 AT 900 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	30.8	9.7	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASTIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479

OCH	CLOCK	ELAPSED	OZONE	NO	NO2-UNC	NOX-UNC	T
	TIME	TIME	PPM	PPM	PPM	PPM	DEG C
BY HR.	(MIN)	D-1790	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	DORIC-1
1	840	-20	0.002	0.209	0.199	0.420	24.0
1	1400	300	0.682	0.011	0.235	0.236	37.7

----- NO DATA TAKEN

AFF- 86
JP-8(SHALE) VS N-BUTANE
1981 JUNE 4

0445: START FILL. WET: 7.0; DRY: 0.0; DEW PT: 7.0C; R.H.=18%
0630: INJECT 5.0 ML NO₂
0632: INJECT 18.0 ML NO
0640: DIVIDE BAG
0644: INJECT 385 MICROLITERS JP-8(SHALE) INTO SIDE A.
0708: INJECT 125 ML N-BUTANE INTO SIDE B.
0900: UNCOVER BAG. (T=0)
1300: AIR CONDITIONING BROKE. TEMPERATURE IN CHAMP STATION OVER 100F.
1400: INSTRUMENTS MALFUNCTIONING, EXCEPT TEMPERATURE, UV RAD, AND THE BECKMAN.
1620: RUN OVER. BAG DUMPED.

T=0 AT 900 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	39.9	6.0	DEG C
T	DORIC-1	39.9	5.3	DEC C
UV RAD	EPPLEY-2	3.30	1.09	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.362	PPM
NO	B-NOX-1	0.370	PPM
NO ₂ -UNC	B-NOX-1	0.148	PPM
NO ₂ -UNC	B-NOX-1	0.153	PPM
THC	BK6800-1	26.30	PPMC
THC	BK6800-1	34.40	PPMC
N-C4	DMS-1	5.8260	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL FART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 86
 JP-8(SHALE) VS N-BUTANE
 1981 JUNE 4

	CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SII
	TIME	TIME	OZONE	OZONE	NO	NO	NO2-UNC	NO2-UNC	NOX-
	BY HR.	(MIN)	PPM	PPM	PPM	PPM	PPM	PPM	PF
	1	605	-175	0.002	0.002	0.005	0.005	0.005	0.
	1	835	-25	0.012 A	-----	0.362	-----	0.148	-----
	1	845	-15	-----	0.000	-----	0.370	-----	0.153
	1	1005	65	0.025	-----	0.114	-----	0.355	-----
	1	1015	75	-----	0.007	-----	0.187	-----	0.325
	1	1105	125	0.280	-----	0.010	-----	0.377	-----
	1	1115	135	-----	0.029	-----	0.061	-----	0.376
	1	1205	185	0.670	-----	0.009	-----	0.212	-----
	1	1215	195	-----	0.100	-----	0.018	-----	0.405
	1	1305	245	0.729	-----	0.010	-----	0.121	-----
	1	1315	255	-----	0.192	-----	0.010	-----	0.354
	1	1405	305	0.704 B	-----	0.012 B	-----	0.100 B	-----
	1	1415	315	-----	0.374 B	-----	0.018 B	-----	0.435 B
	1	1505	365	0.632	-----	0.032	-----	0.089	-----
	1	1515	375	-----	0.451	-----	0.042	-----	0.420
	1	1605	425	0.608	-----	0.051	-----	0.062	-----
	1	1615	435	-----	0.544	-----	0.042	-----	0.369

	CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SII
	TIME	TIME	T	T	UV RAD	CONDENS	CONDENS	*PART>3	*PAF
	BY HR.	(MIN)	DEG C	DEG C	MW/CM2	10E3/CC	10E3/CC	PART/CC	PART
432			DORIC-1	DORIC-1	EPPLEY-2	CNC-143	CNC-143	CLIMET	CLJ
	1	605	-175	27.2	27.2	-----	0.0	0.0	0.
	1	835	-25	33.8	-----	-----	14.2	-----	0.
	1	845	-15	-----	36.2	-----	-----	0.0	-----
	1	1005	65	38.2	-----	3.00	12.4	-----	0.
	1	1015	75	-----	40.4	3.91	-----	0.0	-----
	1	1105	125	41.0	-----	4.55	10.9	-----	11.
	1	1115	135	-----	41.1	4.68	-----	0.0	-----
	1	1205	185	43.5	-----	4.06	8.7	-----	426.
	1	1215	195	-----	43.5	4.00	-----	0.0	-----
	1	1305	245	44.5	-----	3.91	6.6	-----	449.
	1	1315	255	-----	42.9	3.87	-----	0.0	-----
	1	1405	305	44.8	-----	3.46	3.6	-----	4. B
	1	1415	315	-----	43.7	3.37	-----	0.0	-----
	1	1505	365	45.3	-----	2.54	2.2	-----	4.
	1	1515	375	-----	43.4	2.36	-----	0.0	-----
	1	1605	425	40.5	-----	1.37	1.2	-----	409.
	1	1615	435	-----	40.4	1.18	-----	0.0	-----

----- NO DATA TAKEN

12 NOV 1981

PAGE 2

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	SIDE 2 N-C4 PPM DMS-1
5	0.005	0.005	0.010	0.010	0.95	0.95	0.0013
-	0.148	-----	0.510	-----	26.30	-----	-----
0	-----	0.153	-----	0.520	-----	34.40	5.826
-	0.355	-----	0.479	-----	25.10	-----	-----
7	-----	0.325	-----	0.512	-----	34.10	3.448 C
1	0.377	-----	0.369	-----	23.00	-----	-----
-	-----	0.376	-----	0.430	-----	33.50	2.414 C
1	0.212	-----	0.211	-----	20.00	-----	-----
-	-----	0.405	-----	0.403	-----	33.30	1.978 C
8	0.121	-----	0.125	-----	18.50	-----	-----
-	-----	0.354	-----	0.350	-----	32.90	1.889 C
B	0.100 B	-----	0.107 B	-----	17.70	-----	-----
-	-----	0.435 B	-----	0.435 B	-----	32.40	5.416
8	0.089	-----	0.111	-----	16.80	-----	-----
-	-----	0.420	-----	0.443	-----	32.10	-----
42	0.062	-----	0.108	-----	16.90	-----	-----
42	-----	0.369	-----	0.400	-----	32.20	-----

	SIDE 2 CONDENS #PART>.3 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0	0.0	0.	0.	0.	0.	0.	0.
2	-----	0.	-----	0.	-----	0.	-----
4	0.0	-----	0.	-----	0.	-----	0.
4	-----	0.	-----	0.	-----	0.	-----
9	0.0	-----	0.	-----	0.	-----	0.
9	-----	11.	-----	0.	-----	0.	-----
7	0.0	-----	0.	-----	0.	-----	0.
7	-----	426.	-----	212.	-----	12.	-----
6	0.0	-----	15.	-----	0.	-----	0.
6	-----	449.	-----	300.	-----	54.	-----
6	0.0	-----	6. B	-----	0. B	-----	0.
6	-----	4. B	-----	3. B	-----	4. B	-----
2	0.0	-----	8.	-----	0.	-----	0. B
2	-----	4.	-----	2.	-----	3.	-----
2	0.0	-----	4.	-----	0.	-----	0.
2	-----	409.	-----	225.	-----	21.	-----
2	0.0	-----	4.	-----	0.	-----	0.

2

43
AFF- 86
JP-8(SHALE) VS N-BUTANE
1981 JUNE 4

	CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
	TIME	TIME	BSCAT	ESCAT	AER.V	AER.V	AER.N	AER.N	AER.
	BY HR.	(MIN)	10-4 M-1	10-4 M-1	UM3/CC	UM3/CC	PART/CC	PART/CC	UM2
			MRI-388	MRI-388	TSI-023	TSI-023	TSI-023	TSI-023	TSI-
1	605	-175	0.0	0.0	1.	1.	4921.	4921.	4
1	730	-90	-----	-----	-----	-----	-----	-----	-----
1	835	-25	0.1	-----	-1.	-----	3.9E 04	-----	7
1	845	-15	-----	0.2	-----	3.	-----	799.	---
1	1005	65	0.2	-----	5.	-----	6.9E 04	-----	43
1	1015	75	-----	0.2	-----	2.	-----	1325.	---
1	1105	125	2.2	-----	16.	-----	7.0E 04	-----	113
1	1115	135	-----	0.2	-----	5.	-----	-262.	---
1	1205	185	18.0	-----	28.	-----	8.1E 04	-----	171
1	1215	195	-----	0.5	-----	-1.	-----	2005.	---
1	1305	245	25.0	-----	27.	-----	6.7E 04	-----	153
1	1315	255	-----	0.8	-----	4.	-----	-84.	---
1	1405	305	22.0	-----	18.	-----	4.4E 04	-----	108
1	1415	315	-----	0.0	-----	1.	-----	1001.	---
1	1505	365	18.0	-----	12.	-----	2.6E 04	-----	78
1	1515	375	-----	1.0	-----	-2.	-----	264.	---
1	1605	425	7.8	-----	16.	-----	1.5E 04	-----	60
1	1615	435	-----	0.3	-----	3.	-----	89.	---

	CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
	TIME	TIME	N-C11	N-C11	N-C12	N-C12	N-C13	N-C13	N-C
	BY HR.	(MIN)	PPM						
			VAR 3700						
1	605	-175	-----	-----	-----	-----	-----	-----	-----
1	730	-90	0.1584	0.1584	0.0965	0.0965	0.0455	0.0455	0.
1	835	-25	-----	-----	-----	-----	-----	-----	-----
1	845	-15	-----	-----	-----	-----	-----	-----	-----
1	1005	65	-----	0.1551	-----	0.0974	-----	0.0454	0.
1	1015	75	-----	-----	-----	-----	-----	-----	-----
1	1105	125	0.1522	-----	0.0977	-----	0.0426	-----	0.
1	1115	135	-----	-----	-----	-----	-----	-----	-----
1	1205	185	-----	-----	-----	-----	-----	-----	-----
1	1215	195	-----	-----	-----	-----	-----	-----	-----
1	1305	245	0.1312	-----	0.0828	-----	0.0386	-----	0.
1	1315	255	-----	-----	-----	-----	-----	-----	-----
1	1405	305	-----	-----	-----	-----	-----	-----	-----
1	1415	315	-----	-----	-----	-----	-----	-----	-----
1	1505	365	0.1340	-----	0.0981	-----	0.0564	-----	-----
1	1515	375	-----	-----	-----	-----	-----	-----	-----
1	1605	425	-----	-----	-----	-----	-----	-----	-----
1	1615	435	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700
4921.	4921.	45.	45.	-----	-----
3.9E 04	-----	71.	-----	0.1408	0.1408
-----	799.	-----	36.	-----	-----
6.9E 04	-----	434.	-----	-----	0.1437
-----	1325.	-----	23.	-----	-----
7.0E 04	-----	1133.	-----	0.1305	-----
-----	-262.	-----	32.	-----	-----
8.1E 04	-----	1715.	-----	-----	-----
-----	2005.	-----	4.	-----	-----
6.7E 04	-----	1533.	-----	0.1144	-----
-----	-84.	-----	51.	-----	-----
4.4E 04	-----	1035.	-----	-----	-----
-----	1001.	-----	12.	-----	-----
2.6E 04	-----	789.	-----	0.1077	-----
-----	264.	-----	-21.	-----	-----
1.5E 04	-----	600.	-----	-----	-----
-----	89.	-----	35.	-----	-----

SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1
-----	-----	-----	-----	0.91	0.91
0.0455	0.0455	0.019	0.0306	-----	-----
-----	-----	-----	-----	0.93	-----
-----	-----	-----	-----	-----	0.90
-----	0.0454	0.018	0.0262	0.94	-----
-----	-----	-----	-----	-----	0.94
0.0426	-----	0.015	0.0234	0.98	-----
-----	-----	-----	-----	-----	0.94
-----	-----	-----	-----	1.02	-----
-----	-----	-----	-----	-----	0.93
0.0386	-----	0.016	0.0180	1.14	-----
-----	-----	-----	-----	-----	1.02
-----	-----	-----	-----	1.18	-----
-----	-----	-----	-----	-----	1.04
0.0564	-----	-----	-----	1.16	-----
-----	-----	-----	-----	-----	1.11
-----	-----	-----	-----	1.30	-----
-----	-----	-----	-----	-----	1.07

2

AFF- 86
 JP-8(SHALE) VS N-BUTANE
 1981 JUNE 4

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 2	SIDE 2	SIDE 2	SI PAR TSI
		PAN PPM ECD-3	PAN PPM ECD-3	HCHO PPM CA	HCHO PPM CA	ACETALD PPM 10°C-600	ACETONE PPM 10°C-600		
1 605	-175	0.000	0.000	-----	-----	0.0043	0.0012	21	
1 810	-50	-----	-----	0.036	0.006	-----	-----	---	
1 835	-25	0.000	-----	-----	-----	-----	-----	3.	
1 845	-15	-----	0.000	-----	-----	-----	-----	---	
1 1005	65	0.002	-----	-----	-----	-----	-----	2.	
1 1015	75	-----	0.012	-----	-----	-----	-----	---	
1 1105	125	0.035	-----	-----	-----	-----	-----	51	
1 1115	135	-----	0.016	-----	-----	-----	-----	---	
1 1200	180	-----	-----	0.065	0.017	-----	-----	---	
1 1205	185	0.090	-----	-----	-----	-----	-----	95	
1 1215	195	-----	0.031	-----	-----	-----	-----	---	
1 1305	245	0.104	-----	-----	-----	-----	-----	88	
1 1315	255	-----	0.047	-----	-----	-----	-----	---	
1 1405	305	0.054 B	-----	-----	-----	-----	-----	68	
1 1415	315	-----	0.030 B	-----	-----	-----	-----	---	
1 1505	365	-----	-----	-----	-----	-----	-----	-1	
1 1515	375	-----	-----	-----	-----	-----	-----	---	
1 1605	425	-----	-----	-----	-----	-----	-----	-6	
1 1610	430	-----	-----	0.046	0.059	-----	-----	---	
1 1615	435	-----	-----	-----	-----	0.2365	-----	---	

434

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 2	SI PAR TSI
		PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023		
1 605	-175	666.	666.	96.	96.	74.	74.	74.	---
1 835	-25	755.	-----	-265.	-----	135.	-----	-----	---
1 845	-15	-----	-444.	-----	313.	-----	-37.	-----	---
1 1005	65	1.1E 04	-----	169.	-----	-49.	-----	-----	---
1 1015	75	-----	0.	-----	24.	-----	0.	-----	---
1 1105	125	5.1E 04	-----	2796.	-----	0.	-----	-----	---
1 1115	135	-----	0.	-----	48.	-----	-74.	-----	---
1 1205	185	6.1E 04	-----	1.1E 04	-----	49.	-----	-----	---
1 1215	195	-----	222.	-----	120.	-----	0.	-----	---
1 1305	245	4.6E 04	-----	1.2E 04	-----	37.	-----	-----	---
1 1315	255	-----	44.	-----	24.	-----	-98.	-----	---
1 1405	305	3.0E 04	-----	9833.	-----	283.	-----	-----	---
1 1415	315	-----	444.	-----	0.	-----	0.	-----	---
1 1505	365	1.3E 04	-----	9519.	-----	271.	-----	-----	---
1 1515	375	-----	400.	-----	-72.	-----	-37.	-----	---
1 1605	425	9146.	-----	7182.	-----	135.	-----	-----	---
1 1615	435	-----	-89.	-----	96.	-----	74.	-----	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

SIDE 2 ACETALD PPM 10'C-600	SIDE 2 ACETONE PPM 10'C-600	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023
0.0043	0.0012	2171.	2171.	1914.	1914.
-----	-----	-----	-----	-----	-----
-----	-----	3.6E 04	-----	2697.	-----
-----	-----	-----	501.	-----	435.
-----	-----	2.7E 04	-----	3.1E 04	-----
-----	-----	-----	668.	-----	609.
-----	-----	5177.	-----	1.1E 04	-----
-----	-----	-----	0.	-----	-261.
-----	-----	-----	-----	-----	-----
-----	-----	9519.	-----	-174.	-----
-----	-----	-----	1837.	-----	-174.
-----	-----	8851.	-----	348.	-----
-----	-----	-----	0.	-----	-174.
-----	-----	6847.	-----	-2175.	-----
-----	-----	-----	1336.	-----	-783.
-----	-----	-167.	-----	3654.	-----
-----	-----	-----	-167.	-----	174.
-----	-----	-----	-----	-870.	-----
-----	-----	-----	-----	-----	-----
0.2365	-----	-----	-167.	-----	174.

SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
74.	74.	0.	0.	0.	0.
135.	-----	-53.	-----	0.	-----
-----	-37.	-----	20.	-----	11.
-49.	-----	40.	-----	0.	-----
-----	0.	-----	20.	-----	4.
0.	-----	13.	-----	0.	-----
-----	-74.	-----	0.	-----	25.
49.	-----	33.	-----	0.	-----
-----	0.	-----	7.	-----	-7.
37.	-----	40.	-----	0.	-----
-----	-98.	-----	120.	-----	0.
283.	-----	-67.	-----	0.	-----
-----	0.	-----	0.	-----	4.
271.	-----	-7.	-----	-21.	-----
-----	-37.	-----	-33.	-----	0.
135.	-----	-40.	-----	25.	-----
-----	74.	-----	-13.	-----	14.

2

AFF- 86
JP-8(SHALE) VS N-BUTANE
1981 JUNE 4

NOTES

- A PROBABLE INTERFERENCE BY FUEL ON OZONE READINGS.
- B DATA QUESTIONABLE FOR REMAINDER OF RUN DUE TO AIR CONDITIONER FAILURE.
- C DATA QUESTIONABLE; MUCH SLOWER N-BUTANE CONSUMPTION RATE EXPECTED.

AFF- 87
OZONE DECAY
1981, JUNE 5-8

DAY 1 (JUNE 5)

0905: FILL STARTED. WET: 6.5; DRY: 0.0
1100: INJECTED ~9.5 LITERS OF 2.5% O₃.

DAY 4 (JUNE 8)

0710: BAG IS 80 TO 85% FULL.

RESULTS: O₃ DECAY RATE = 0.40 %/HR

T=0 AT 1140 PST

BAG NO. 22 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790
-------------------------	--------------------------	------------------------

1 1140	0	2.282
--------	---	-------

4 710	4050	1.738
-------	------	-------

----- NO DATA TAKEN

436

AFF- 88
PROPENE/NOX CONDITIONING
1981, JUNE 8

0840: STARTED FILL, WET: 6.5; DRY: 0.0; NEW PT: 7.8C) R.H.=21%
0945: INJECTED 11.0 ML NO2.
0947: INJECTED 12.0 ML NO.
0949: INJECTED 22.5 ML PROPENE
1010: UNCOVER BAG (T=0)
1510: RUN OVER; BAG DUMPED.

T=0 AT 1010 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	38.3	3.1	DEG C
UV RAD	EPPLEY	3.38	0.89	MW/CM2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12° 5% CARBOWAX-600; FID
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	PAN PPM ECD-3	HCH PPM CA
1 1005	-5	0.000	0.220	0.183	0.412	32.7	-----	0.003	----
1 1008	-2	-----	-----	-----	-----	-----	-----	-----	0.0
1 1110	60	0.019	0.107	0.292	0.402	37.0	4.27	-----	----
1 1210	120	0.166	0.019	0.350	0.353	40.0	4.00	-----	----
1 1310	180	0.391	0.011	0.288	0.288	40.4	3.64	-----	----
1 1410	240	0.584	0.011	0.241	0.241	41.0	2.96	-----	----
1 1500	290	-----	-----	-----	-----	-----	-----	-----	0.1
1 1510	300	0.698	0.010	0.211	0.211	38.6	2.05	0.144	----

----- NO DATA TAKEN

AFF- 89
NOX-AIR IRRADIATION
1891, JUNE 9

0728: START FILL. WET: 6.0; DRY: 0.0; DEW PT: 10.1C; R.H.=31%
0904: INJECTED 6.2 ML NO₂
0906: INJECTED 20.0 ML NO
0908: INJECTED .46 ML PROPENE AND .46 ML PROPANE.
1030: UNCOVER BAG (T=0)
1230: END RUN; BAG DUMPED.

RESULTS:

CALC. AVG. OH = 30.8 * ln(PROPANE/PROPENE)/DT = 0.055(+0.006) PPT
CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂) = 0.10 PPB/MIN
NO OXIDATION RATE NEGLIGIBLE

T=0 AT 1030 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	33.9	2.7	DEG C
UV RAD	EPPLEY	4.12	0.17	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.350	PPM
NO ₂ -UNC	B-NOX-1	0.118	PPM
PROPANE	DMS-1	0.0106	PPM
PROPENE	DMS-1	0.0098	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6200-1	BECKMAN HYDROCARBON GC MD 6800 SN100015H
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600; FID
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 89
 NOX-AIR IRRADIATION
 1891, JUNE 9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/ -----
1 925	-65	-----	-----	-----	-----	0.0087	0.0082	0.05
1 1005	-25	-----	-----	-----	-----	0.0099	0.0095	0.03
1 1015	-15	-0.003	0.350	0.118	0.470	-----	-----	---
1 1030	0	-----	-----	-----	-----	0.0106	0.0098	0.07
1 1045	15	-0.002	0.358	0.120	0.481	0.0104	0.0094	0.10
1 1100	30	-0.002	0.358	0.118	0.478	0.0099	0.0089	0.10
1 1115	45	-0.001	0.355	0.121	0.482	0.0111	0.0095	0.15
1 1130	60	-0.001	0.360	0.119	0.478	0.0092	0.0077	0.17
1 1145	75	-0.001	0.356	0.120	0.480	0.0114	0.0091	0.22
1 1200	90	-0.001	0.357	0.112	0.471	0.0119	0.0089	0.28
1 1215	105	-0.001	0.360	0.121	0.485	0.0111	0.0086	0.25
1 1230	120	-0.001	0.356	0.112	0.472	0.0112	0.0086	0.26

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	METHANE PPM BK6800-1	ETHENE PPM PN-1	CO PPM BK6800-1	HCHO PPM CA	ACETALD PPM 10'C-600
1 925	-65	-----	0.0021	-----	-----	0.0099
1 1000	-30	-----	-----	-----	0.015	-----
1 1015	-15	1.89	-----	1.47	-----	-----
1 1045	15	1.90	-----	1.52	-----	-----
1 1100	30	1.89	-----	1.52	-----	-----
1 1115	45	1.88	-----	1.50	-----	-----
1 1130	60	1.89	-----	1.55	-----	-----
1 1145	75	1.90	-----	1.53	-----	-----
1 1200	90	1.90	-----	1.63	-----	-----
1 1215	105	1.89	-----	1.64	-----	-----
1 1220	110	-----	-----	-----	0.010	-----
1 1230	120	1.90	0.0018	1.57	-----	0.0123

----- NO DATA TAKEN

439

12 NOV 1981
PAGE 2

-UNC PM DX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	PAN PPM ECD-3	THC PPMC BN6800-1
-----	0.0087	0.0082	0.0552	-----	-----	-----	-----
-----	0.0099	0.0095	0.0371	-----	-----	-----	-----
.470	-----	-----	-----	28.4	-----	0.002	1.46
-----	0.0106	0.0098	0.0777	-----	-----	-----	-----
.481	0.0104	0.0094	0.1065	31.6	4.09	-----	1.40
.478	0.0099	0.0089	0.1026	33.4	4.09	-----	1.34
.482	0.0111	0.0095	0.1552	33.6	4.18	-----	1.64
.478	0.0092	0.0077	0.1792	34.3	4.36	-----	1.66
.480	0.0114	0.0091	0.2230	35.2	4.27	-----	1.78
.471	0.0119	0.0089	0.2814	35.8	3.82	-----	1.84
.485	0.0111	0.0086	0.2560	37.1	4.14	-----	1.72
.472	0.0112	0.0086	0.2620	36.8	4.00	0.002	1.79

ACETALD
PPM
10'C-600

-----	0.0099
0.015	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
0.010	-----
-----	0.0123

AFF- 90

RJ-4 VS. JP-10
1981, JUNE 10

DAY 1 (JUNE 10)

0445: START FILL. WET: 6.0; DRY: 0.0; DEW PT: -4.9C; R.H.=17%
0628: INJECT 18 ML NO2
0630: INJECTED 5 ML NO
0637: DIVIDED BAG
0652: INJECTED 312 MICROLITERS OF RJ-4 INTO SIDE A.
0711: INJECTED 312 MICROLITERS OF JP-10 INTO SIDE B.
0900: UNCOVER BAG (T=0)
0905: WEATHER: OVERCAST BUT CLEARING.
1100: WEATHER CLEARING, SUN COMING OUT.
1620: SAMPLING ENDED, BAG COVERED.

DAY 2 (JUNE 11)

0900: UNCOVER BAG
0905: WEATHER: FOG AND LOW CLOUDS.
1100: CLOUDS HAVE CLEARED, SUN IS OUT.
1520: RUN OVER, BAG DUMPED.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	34(+3)	32(+4)
AVG.UV(MW/CM2)	2.9(+0.9)	3.0(+0.8)

NOTE: NO AND NOX DATA FOR DAY 1 ON SIDE 2 (JP-10)
APPEARS TO BE ANOMOLOUS.

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	30.1	6.1	DEG C	SIDE 1
T	DORIC-1	30.5	6.0	DEG C	SIDE 2
UV RAD	EPPELEY-2	2.92	0.82	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.363	PPM	SIDE 1
NO	B-NOX-1	0.356	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.118	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.115	PPM	SIDE 2
THC	BK6800-1	31.10	PPMC	SIDE 1
THC	BK6800-1	40.20	PPMC	SIDE 2

AFF- 90
RJ-4 VS. JP-10
1981, JUNE 10

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	R-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
2000	ECD-1	RM-121; 12% CARBOWAX-400 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
4131	EFFLEY-2	EFFLEY 14290 UV RADIOMETER; UNDER BAG

T-17

AFF- 90
RJ-4 VS. JP-10
1981, JUNE 10

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX-U PPM
1 605	-175	0.000	0.000	0.002	0.002	0.002	0.002	0.002
1 835	-25	0.000	-----	0.363	-----	0.118	-----	0.4
1 845	-15	-----	0.000	-----	0.356 A	-----	0.115 A	-----
1 1005	65	0.000	-----	0.336	-----	0.134	-----	0.4
1 1015	75	-----	0.000	-----	0.261	-----	0.107	-----
1 1105	125	0.002	-----	0.309	-----	0.152	-----	0.4
1 1115	135	-----	0.000	-----	0.130	-----	0.078	-----
1 1205	185	0.002	-----	0.277	-----	0.172	-----	0.4
1 1215	195	-----	0.001	-----	0.056	-----	0.050	-----
1 1305	245	0.005	-----	0.233	-----	0.203	-----	0.4
1 1315	255	-----	0.002	-----	0.041	-----	0.050	-----
1 1405	305	0.008	-----	0.190	-----	0.237	-----	0.4
1 1415	315	-----	0.001	-----	0.042	-----	0.059	-----
1 1505	365	0.009	-----	0.150	-----	0.261	-----	0.4
1 1515	375	-----	0.000	-----	0.039	-----	0.067	-----
1 1605	425	0.008	-----	0.120	-----	0.282	-----	0.4
1 1615	435	-----	0.000	-----	0.023	-----	0.033	-----
2 835	1415	0.000	-----	0.100	-----	0.294	-----	0.3
2 845	1425	-----	0.000	-----	0.101	-----	0.135	-----
2 1005	1505	0.014	-----	0.094	-----	0.292	-----	0.3
2 1015	1515	-----	0.003	-----	0.107	-----	0.134	-----
2 1105	1565	0.031	-----	0.072	-----	0.298	-----	0.3
2 1115	1575	-----	0.009	-----	0.058	-----	0.097	-----
2 1205	1625	0.045	-----	0.049	-----	0.312	-----	0.3
2 1215	1635	-----	0.011	-----	0.038	-----	0.082	-----
2 1305	1685	0.076	-----	0.028	-----	0.317	-----	0.3
2 1315	1695	-----	0.011	-----	0.030	-----	0.076	-----
2 1405	1745	0.116	-----	0.017	-----	0.298	-----	0.3
2 1415	1755	-----	0.013	-----	0.030	-----	0.090	-----
2 1505	1805	0.164	-----	0.010	-----	0.265	-----	0.2
2 1515	1815	-----	0.014	-----	0.029	-----	0.088	-----

----- NO DATA TAKEN

	SIDE 1 NO ₂ -UNC PPM B-NOX-1	SIDE 2 NO ₂ -UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BN6800-1	SIDE 2 THC PPMC RK6800-1
E 2	0.002	0.002	0.004	0.004	1.10	1.10
0	0.118	-----	0.483	-----	31.10	-----
M	-----	0.115 A	-----	0.475 A	-----	40.20
X-1	-----	0.134	-----	0.470	-----	31.20
356 A	-----	0.107	-----	0.397	-----	39.80
261	-----	0.152	-----	0.465	-----	31.90
130	-----	0.078	-----	0.249	-----	40.30
056	-----	0.172	-----	0.454	-----	31.10
041	-----	0.050	-----	0.106	-----	-----
042	-----	0.203	-----	0.442	-----	31.00
039	-----	0.237	-----	0.101	-----	40.10
023	-----	0.059	-----	0.431	-----	30.90
101	-----	0.261	-----	0.098	-----	40.20
107	-----	0.067	-----	0.412	-----	30.60
.058	-----	0.282	-----	0.093	-----	40.00
.038	-----	0.294	-----	0.400	-----	30.40
.030	-----	0.135	-----	0.061	-----	40.00
.029	-----	0.292	-----	0.392	-----	30.10
107	-----	0.134	-----	0.238	-----	39.90
.058	-----	0.298	-----	0.381	-----	29.90
.038	-----	0.097	-----	0.238	-----	39.20
.030	-----	0.312	-----	0.368	-----	29.90
.029	-----	0.082	-----	0.144	-----	39.70
101	-----	0.317	-----	0.349	-----	29.60
.030	-----	0.076	-----	0.112	-----	39.50
.029	-----	0.298	-----	0.325	-----	29.00
107	-----	0.090	-----	0.099	-----	39.40
.030	-----	0.265	-----	0.300	-----	28.60
.029	-----	0.088	-----	0.111	-----	39.20
101	-----	0.076	-----	0.262	-----	28.20
.029	-----	0.298	-----	0.107	-----	39.10

J

AFF- 90
 RJ-4 VS. JP-10
 1981, JUNE 10

CLOCK DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2	SIDE 1	SIDE 2	SIDE 1	SIDE 1
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC EPFLEY-2	CONDENS 10E3/CC CNC-143	PART/CC CLIMET	*PART>.3 PART CLI
1 605	-175	19.2	19.2	-----	0.0	0.0	0.	---
1 835	-25	21.2	-----	-----	13.0	-----	0.	---
1 845	-15	-----	21.4	-----	-----	0.0	-----	---
1 1005	65	26.3	-----	2.82	9.1	-----	0.	---
1 1015	75	-----	27.4	3.19	-----	1.0	-----	---
1 1105	125	30.8	-----	3.64	6.6	-----	0.	---
1 1115	135	-----	31.4	3.78	-----	0.7	-----	---
1 1205	185	33.7	-----	3.67	5.0	-----	0.	---
1 1215	195	-----	35.0	3.82	-----	0.3	-----	---
1 1305	245	36.0	-----	3.50	4.6	-----	2.	---
1 1315	255	-----	36.0	3.50	-----	0.5	-----	4
1 1405	305	37.0	-----	2.63	3.6	-----	79.	---
1 1415	315	-----	36.5	2.82	-----	0.4	-----	12
1 1505	365	36.1	-----	2.18	3.2	-----	229.	---
1 1515	375	-----	36.0	2.09	-----	0.4	-----	18
1 1605	425	33.5	-----	1.37	2.4	-----	308.	---
1 1615	435	-----	33.2	1.28	-----	0.4	-----	24
2 835	1415	20.8	-----	-----	0.3	-----	85.	---
2 845	1425	-----	20.7	-----	-----	0.2	-----	5
2 1005	1505	23.4	-----	1.77	0.3	-----	220.	---
2 1015	1515	-----	24.4	2.20	-----	0.2	-----	5
2 1105	1565	29.0	-----	3.73	0.3	-----	213.	---
2 1115	1575	-----	30.0	3.82	-----	0.2	-----	4
2 1205	1625	31.2	-----	3.57	0.2	-----	189.	---
2 1215	1635	-----	32.9	3.91	-----	0.1	-----	3
2 1305	1685	33.4	-----	3.55	0.1	-----	159.	---
2 1315	1695	-----	33.6	3.46	-----	0.0	-----	3
2 1405	1745	35.6	-----	2.59	0.1	-----	127.	---
2 1415	1755	-----	35.2	2.73	-----	0.0	-----	2
2 1505	1805	35.1	-----	2.18	0.0	-----	95.	---
2 1515	1815	-----	35.1	2.05	-----	0.0	-----	1

----- NO DATA TAKEN

12 NOV 1981

PAGE 4

	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
	0.0	0.	0.	0.	0.	0.	0.
	-----	0.	-----	0.	-----	0.	-----
	0.0	-----	0.	-----	0.	-----	0.
	-----	0.	-----	0.	-----	0.	-----
	1.0	-----	0.	-----	0.	-----	0.
	-----	0.	-----	0.	-----	0.	-----
	0.7	-----	1.	-----	0.	-----	0.
	-----	0.	-----	0.	-----	0.	-----
	0.3	-----	5.	-----	0.	-----	0.
	-----	2.	-----	0.	-----	0.	-----
	0.5	-----	45.	-----	0.	-----	0.
	-----	79.	-----	0.	-----	0.	-----
	0.4	-----	125.	-----	5.	-----	0.
	-----	229.	-----	19.	-----	0.	-----
	0.4	-----	186.	-----	18.	-----	0.
	-----	308.	-----	64.	-----	0.	-----
	0.4	-----	240.	-----	32.	-----	0.
	-----	85.	-----	2.	-----	0.	-----
	0.2	-----	54.	-----	1.	-----	0.
	-----	220.	-----	30.	-----	0.	-----
	0.2	-----	52.	-----	5.	-----	0.
	-----	213.	-----	100.	-----	2.	-----
	0.2	-----	45.	-----	36.	-----	0.
	-----	189.	-----	187.	-----	13.	-----
	0.1	-----	38.	-----	36.	-----	0.
	-----	159.	-----	161.	-----	14.	-----
	0.0	-----	31.	-----	29.	-----	0.
	-----	127.	-----	128.	-----	41.	-----
	0.0	-----	25.	-----	23.	-----	1.
	-----	95.	-----	95.	-----	92.	-----
	0.0	-----	19.	-----	18.	-----	4.

2

AFF - 90
 RJ-4 VS. JP-10
 1981, JUNE 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT MRI-388	SIDE 2 BSCAT MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SI AE UM TSI
1 605	-175	0.2	0.2	5.	5.	-277.	-277.	--
1 735	-85	-----	-----	-----	-----	-----	-----	--
1 835	-25	0.3	-----	0.	-----	3.9E 04	-----	--
1 845	-15	-----	0.9	-----	5.	-----	-324.	--
1 1005	65	0.3	-----	4.	-----	5.1E 04	-----	2
1 1015	75	-----	1.0	-----	6.	-----	7126.	--
1 1105	125	0.5	-----	7.	-----	3.6E 04	-----	3
1 1115	135	-----	1.7	-----	1.	-----	4853.	--
1 1205	185	0.8	-----	6.	-----	2.8E 04	-----	4
1 1215	195	-----	1.8	-----	1.	-----	5164.	--
1 1305	245	1.8	-----	9.	-----	2.6E 04	-----	4
1 1315	255	-----	1.6	-----	2.	-----	5411.	--
1 1405	305	2.8	-----	8.	-----	2.6E 04	-----	4
1 1415	315	-----	1.3	-----	4.	-----	4438.	--
1 1505	365	4.0	-----	16.	-----	2.3E 04	-----	5
1 1515	375	-----	1.5	-----	3.	-----	3737.	--
1 1605	425	4.6	-----	10.	-----	2.3E 04	-----	5
1 1615	435	-----	1.5	-----	5.	-----	4329.	--
2 715	1335	-----	-----	-----	-----	-----	-----	--
2 835	1415	0.8	-----	2.	-----	6795.	-----	--
2 845	1425	-----	1.1	-----	4.	-----	5255.	--
2 1005	1505	1.2	-----	4.	-----	5064.	-----	1
2 1015	1515	-----	1.0	-----	0.	-----	3237.	--
2 1105	1565	2.0	-----	3.	-----	6087.	-----	1
2 1115	1575	-----	1.2	-----	3.	-----	4736.	--
2 1205	1625	2.0	-----	4.	-----	5260.	-----	1
2 1215	1635	-----	1.2	-----	2.	-----	5739.	--
2 1305	1685	1.7	-----	2.	-----	7361.	-----	--
2 1315	1695	-----	1.2	-----	2.	-----	7409.	--
2 1405	1745	1.5	-----	4.	-----	9834.	-----	1
2 1415	1755	-----	1.3	-----	2.	-----	1.1E 04	--
2 1505	1805	1.4	-----	3.	-----	1.0E 04	-----	1
2 1515	1815	-----	1.6	-----	5.	-----	1.2E 04	--

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

	SIDE 1 AER.N PART/CC TSI-^23	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 METHANE PPM BK6800-1	SIDE 1 RJ-4(A) PPMC VAR 3700	SIDE 1 RJ-4(B) PPMC VAR 3700
	-277.	-277.	35.	35.	1.87	-----	-----
	-----	-----	-----	-----	-----	1.307	0.964
	3.9E 04	-----	92.	-----	1.72	-----	-----
	-----	-324.	-----	59.	-----	-----	-----
	5.1E 04	-----	298.	-----	1.72	1.332	0.988
	-----	7126.	-----	135.	-----	-----	-----
	3.6E 04	-----	387.	-----	1.72	-----	-----
	-----	4853.	-----	89.	-----	-----	-----
	2.8E 04	-----	413.	-----	1.71	1.292	0.959
	-----	5164.	-----	102.	-----	-----	-----
	2.6E 04	-----	457.	-----	1.73	-----	-----
	-----	5411.	-----	103.	-----	-----	-----
	2.6E 04	-----	493.	-----	1.70	-----	-----
	-----	4438.	-----	122.	-----	-----	-----
	2.3E 04	-----	561.	-----	1.71	1.264	0.951
	-----	3737.	-----	113.	-----	-----	-----
	2.3E 04	-----	501.	-----	1.70	-----	-----
	-----	4329.	-----	137.	-----	-----	-----
	-----	-----	-----	-----	-----	1.246	0.933
	6795.	-----	96.	-----	1.74	-----	-----
	-----	5255.	-----	64.	-----	-----	-----
	5064.	-----	105.	-----	1.71	1.339	1.004
	-----	3237.	-----	45.	-----	-----	-----
	6087.	-----	103.	-----	1.72	-----	-----
	-----	4726.	-----	70.	-----	-----	-----
	5260.	-----	108.	-----	1.72	1.242	0.933
	-----	5739.	-----	77.	-----	-----	-----
	7361.	-----	98.	-----	1.71	-----	-----
	-----	7409.	-----	76.	-----	-----	-----
	9834.	-----	120.	-----	1.72	1.183	0.888
	-----	1.1E 04	-----	92.	-----	-----	-----
	1.0E 04	-----	107.	-----	1.72	-----	-----
	-----	1.2E 04	-----	138.	-----	-----	-----

2

AFF- 90

RJ-4 VS. JP-10

1981, JUNE 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 1		SIDE 1		SIDE 1		SIDE 2	SIDE 3	
		RJ-4(C) PPMC	VAR 3700	RJ-4(D) PPMC	VAR 3700	RJ-4(E) PPMC	VAR 3700	RJ-4(F) PPMC	VAR 3700	RJ-4(G) PPMC	VAR 3700	JF-10 PPM
1 605	-175	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 735	-85	1.362	1.460	3.673	1.317	2.159	-----	-----	-----	-----	-----	1
1 835	-25	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 845	-15	-----	-----	-----	-----	-----	-----	-----	-----	1.635	-----	1
1 1005	65	1.427	1.538	3.848	1.324	1.963	-----	-----	-----	-----	-----	1
1 1015	75	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1105	125	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1115	135	-----	-----	-----	-----	-----	-----	-----	-----	0.5103	-----	1
1 1205	185	1.382	1.458	3.634	1.226	1.732	-----	-----	-----	-----	-----	1
1 1215	195	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1305	245	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1315	255	-----	-----	-----	-----	-----	-----	-----	-----	0.2031	-----	1
1 1405	305	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1415	315	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1505	365	1.348	1.404	3.489	1.217	1.654	-----	-----	-----	-----	-----	1
1 1515	375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1605	425	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
1 1615	435	-----	-----	-----	-----	-----	-----	-----	-----	0.1767	-----	1
<i>445</i>												
2 715	1335	1.346	1.429	3.590	1.307	1.829	-----	-----	-----	-----	-----	1
2 815	1395	-----	-----	-----	-----	-----	-----	-----	-----	1.509	-----	1
2 835	1415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 845	1425	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 1005	1505	1.365	1.444	3.563	1.245	1.866	-----	-----	-----	-----	-----	1
2 1015	1515	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 1105	1565	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 1115	1575	-----	-----	-----	-----	-----	-----	-----	-----	0.6499	-----	1
2 1205	1625	1.320	1.395	3.442	1.155	1.699	-----	-----	-----	-----	-----	1
2 1215	1635	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 1305	1685	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 1315	1695	-----	-----	-----	-----	-----	-----	-----	-----	0.3971	-----	1
2 1405	1745	1.254	1.321	3.226	1.092	1.593	-----	-----	-----	-----	-----	1
2 1415	1755	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 1505	1805	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1
2 1515	1815	-----	-----	-----	-----	-----	-----	-----	-----	0.3523	-----	1

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

SIDE 1 RJ-4(G) PPMC VAR 3700	SIDE 2 JP-10 PPM VAR 3700	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BN6800-1	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1
2.159	-----	1.15	1.15	0.000	0.000
-----	-----	1.20	-----	0.000	-----
1.963	-----	1.635	1.20	-----	0.000
-----	-----	1.22	-----	0.001	-----
-----	-----	-----	1.22	-----	0.001
-----	-----	1.26	-----	0.001	-----
-----	0.5103	-----	1.26	-----	0.005
1.732	-----	1.32	-----	0.001	-----
-----	-----	-----	-----	-----	0.010
-----	-----	1.39	-----	0.002	-----
-----	0.2031	-----	1.41	-----	0.010
-----	-----	1.43	-----	0.002	-----
-----	-----	-----	1.49	-----	0.009
1.654	-----	1.48	-----	0.002	-----
-----	-----	-----	1.55	-----	0.011
-----	-----	1.47	-----	0.002	-----
-----	0.1767	-----	1.57	-----	0.004
1.829	-----	-----	-----	-----	-----
-----	1.509	-----	-----	-----	-----
-----	-----	1.55	-----	0.000	-----
-----	-----	-----	1.65	-----	0.001
1.866	-----	1.57	-----	0.000	-----
-----	-----	-----	1.62	-----	0.001
-----	-----	1.62	-----	0.001	-----
-----	0.6499	-----	1.71	-----	0.003
1.699	-----	1.65	-----	0.002	-----
-----	-----	-----	1.61	-----	0.006
-----	-----	1.68	-----	0.003	-----
-----	0.3971	-----	1.76	-----	0.009
1.593	-----	1.77	-----	0.004	-----
-----	-----	-----	1.76	-----	0.014
-----	-----	1.75	-----	0.007	-----
-----	0.3523	-----	1.83	-----	0.002

2

AFF- 90
 RJ-4 VS. JP-10
 1981, JUNE 10

	CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	S PA TS
	1 605	-175	-----	-----	-334.	-334.	0.	0.	-
	1 810	-50	0.013	0.000	-----	-----	-----	-----	-
	1 835	-25	-----	-----	3.3E 04	-----	5307.	-----	-
	1 845	-15	-----	-----	-----	-1169.	-----	696.	-
	1 1005	65	-----	-----	2.3E 04	-----	2.1E 04	-----	6
	1 1015	75	-----	-----	-----	668.	-----	2262.	-
	1 1105	125	-----	-----	6179.	-----	1.8E 04	-----	1
	1 1115	135	-----	-----	-----	334.	-----	-87.	-
	1 1200	180	0.002	0.000	-----	-----	-----	-----	-
	1 1205	185	-----	-----	-334.	-----	9831.	-----	1
	1 1215	195	-----	-----	-----	501.	-----	0.	-
	1 1305	245	-----	-----	501.	-----	5307.	-----	1
	1 1315	255	-----	-----	-----	668.	-----	261.	-
	1 1405	305	-----	-----	4008.	-----	957.	-----	1
	1 1415	315	-----	-----	-----	0.	-----	174.	-
	1 1505	365	-----	-----	1837.	-----	348.	-----	1
	1 1515	375	-----	-----	-----	-668.	-----	87.	-
	1 1605	425	-----	-----	2338.	-----	1479.	-----	1
	1 1610	430	0.004	0.002	-----	-----	-----	-----	-
	1 1615	435	-----	-----	-----	334.	-----	522.	-
444	2 810	1390	0.010	0.021	-----	-----	-----	-----	-
	2 835	1415	-----	-----	2839.	-----	1566.	-----	18
	2 845	1425	-----	-----	-----	2171.	-----	1914.	--
	2 1005	1505	-----	-----	1169.	-----	1305.	-----	19
	2 1015	1515	-----	-----	-----	835.	-----	870.	--
	2 1105	1565	-----	-----	2004.	-----	1131.	-----	20
	2 1115	1575	-----	-----	-----	2338.	-----	609.	--
	2 1200	1620	0.029	0.010	-----	-----	-----	-----	--
	2 1205	1625	-----	-----	1336.	-----	1392.	-----	17
	2 1215	1635	-----	-----	-----	2505.	-----	1131.	--
	2 1305	1685	-----	-----	3173.	-----	1392.	-----	21
	2 1315	1695	-----	-----	-----	3841.	-----	1218.	--
	2 1405	1745	-----	-----	4342.	-----	2436.	-----	24
	2 1415	1755	-----	-----	-----	5678.	-----	2523.	--
	2 1505	1805	-----	-----	4843.	-----	2610.	-----	25
	2 1510	1810	0.023	0.017	-----	-----	-----	-----	--
	2 1515	1815	-----	-----	-----	5678.	-----	4263.	--

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
PART.042	PART.042	PART.075	PART.075	PART.133	PART.133
PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
0.	0.	178.	178.	-120.	-120.
-----	-----	-----	-----	-----	-----
5307.	-----	355.	-----	193.	-----
-----	696.	-----	-44.	-----	96.
2.1E 04	-----	6172.	-----	193.	-----
-----	2262.	-----	3996.	-----	145.
1.8E 04	-----	1.2E 04	-----	434.	-----
-----	-87.	-----	4396.	-----	193.
-----	-----	-----	-----	-----	-----
9831.	-----	1.8E 04	-----	603.	-----
-----	0.	-----	4085.	-----	603.
5307.	-----	1.9E 04	-----	1036.	-----
-----	261.	-----	3685.	-----	916.
957.	-----	1.9E 04	-----	2265.	-----
-----	174.	-----	3419.	-----	843.
348.	-----	1.7E 04	-----	3254.	-----
-----	87.	-----	3286.	-----	1157.
1479.	-----	1.6E 04	-----	3253.	-----
-----	-----	-----	-----	-----	-----
-----	522.	-----	2442.	-----	964.
-----	-----	-----	-----	-----	-----
1566.	-----	1820.	-----	506.	-----
-----	1914.	-----	799.	-----	458.
1305.	-----	1998.	-----	603.	-----
-----	870.	-----	1421.	-----	24.
1131.	-----	2087.	-----	868.	-----
-----	609.	-----	1465.	-----	313.
-----	-----	-----	-----	-----	-----
1392.	-----	1732.	-----	819.	-----
-----	1131.	-----	1820.	-----	217.
1392.	-----	2131.	-----	627.	-----
-----	1218.	-----	2087.	-----	241.
2436.	-----	2442.	-----	578.	-----
-----	2523.	-----	2620.	-----	241.
2610.	-----	2575.	-----	48.	-----
-----	-----	-----	-----	-----	-----
-----	4263.	-----	1732.	-----	241.

2

AFF- 90
RJ-4 VS. JP-10
1981, JUNE 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 605	-175	-25.	-25.	0.	0.	25.	25.
1 835	-25	-74.	----	0.	----	0.	----
1 845	-15	----	49.	----	33.	----	14.
1 1005	65	49.	----	20.	----	0.	----
1 1015	75	----	25.	----	13.	----	18.
1 1105	125	12.	----	67.	----	0.	----
1 1115	135	----	25.	----	-7.	----	0.
1 1205	185	49.	----	0.	----	4.	----
1 1215	195	----	-25.	----	0.	----	0.
1 1305	245	12.	----	0.	----	14.	----
1 1315	255	----	-123.	----	0.	----	4.
1 1405	305	49.	----	7.	----	4.	----
1 1415	315	----	-12.	----	7.	----	7.
1 1505	365	-160.	----	80.	----	28.	----
1 1515	375	----	-148.	----	20.	----	4.
1 1605	425	111.	----	0.	----	7.	----
1 1615	435	----	37.	----	20.	----	11.
2 835	1415	37.	----	27.	----	0.	----
2 845	1425	----	-98.	----	-7.	----	18.
2 1005	1505	-74.	----	60.	----	4.	----
2 1015	1515	----	74.	----	20.	----	-7.
2 1105	1565	-12.	----	7.	----	4.	----
2 1115	1575	----	0.	----	0.	----	11.
2 1205	1625	-49.	----	20.	----	11.	----
2 1215	1635	----	49.	----	13.	----	4.
2 1305	1685	25.	----	13.	----	0.	----
2 1315	1695	----	12.	----	7.	----	4.
2 1405	1745	25.	----	0.	----	11.	----
2 1415	1755	----	12.	----	0.	----	4.
2 1505	1805	148.	----	7.	----	4.	----
2 1515	1815	----	25.	----	100.	----	0.

----- NO DATA TAKEN

NOTES

A ANOMOLOUS BEHAVIOR OBSERVED ON DAY 1. NO, NO2, NOX DATA SHOULD NOT BE USED

AFF- 91
PURE AIR IRRADIATION
1981 JUNE 12

728: FILL STARTED; WET: 6.0, DRY: 0.0, DEW PT.: 9.9, R.H.: 44%
838: FILL ENDED.
900: UNCOVER BAG (T=0).

RESULTS: OZONE FORMATION RATE = 7.2 PPB/HR

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UITS
T	DORIC-1	30.2	4.4	DEG C
UV RAD	EPPLEY-1	3.22	0.91	MW/CM2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4130	EPPLEY-1	ARB TRAILER; EPPLEY 11692 UV RADIOMETER
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015B
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-400 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV F MW/CM2 EPPL
1 845	-15	0.000	0.007	0.001	0.009	0.97	22.9	---
1 930	30	0.001	-----	-----	-----	-----	24.2	1.1
1 1000	60	0.002	-----	-----	-----	-----	25.3	1.1
1 1030	90	0.006	-----	-----	-----	-----	28.6	4.0
1 1100	120	0.008	-----	-----	-----	-----	30.8	4.0
1 1130	150	0.013	-----	-----	-----	-----	31.5	4.0
1 1200	180	0.017	-----	-----	-----	-----	31.5	2.1
1 1230	210	0.023	-----	-----	-----	-----	33.6	3.0
1 1300	240	0.027	-----	-----	-----	-----	34.6	3.0
1 1330	270	0.030	-----	-----	-----	-----	35.0	3.0
1 1400	300	0.036	0.010	0.000	0.011	0.88	34.6	2.1

----- NO DATA TAKEN

12 NOV 1981
PAGE 1

.9, R.H.: 44%

79
ETER
8-2

3030
148
08
SN143

D

UNC PM DX-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	CONDENS 10E3/CC CNC-143	*PART>.3 PART/CC CLIMET	*PART>.5 PART/CC CLIMET	*PART>1 PART/CC CLIMET
.009	0.97	22.9	-----	0.0	0.	0.	0.
-----	-----	24.2	1.73	-----	-----	-----	-----
-----	-----	25.3	1.91	-----	-----	-----	-----
-----	-----	28.6	4.00	-----	-----	-----	-----
-----	-----	30.8	4.18	-----	-----	-----	-----
-----	-----	31.5	4.05	-----	-----	-----	-----
-----	-----	31.5	2.73	-----	-----	-----	-----
-----	-----	33.6	3.82	-----	-----	-----	-----
-----	-----	34.6	3.73	-----	-----	-----	-----
-----	-----	35.0	3.46	-----	-----	-----	-----
.011	0.88	34.6	2.54	5.3	0.	0.	0.

2

AFF- 91
 PURE AIR IRRADIATION
 1981 JUNE 12

CLOCK BY HR.	ELAPSED TIME (MIN)	BSCAT MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	METHANE PPM BK6800-1	METHANE PPM PN-1	ETHE PPM PN-
1 835	-25	-----	-----	-----	-----	-----	1.36	0.00
1 845	-15	0.2	0.	-1045.	5.	1.38	-----	----
1 1400	300	0.3	3.	3.0E 04	259.	1.39	-----	----

CLOCK BY HR.	ELAPSED TIME (MIN)	PROPENE PPM DMS-1	I-C4 PPM DMS-1	N-C4 PPM DMS-1	I-C4= PPM DMS-1	CO PPM BK6800-1	PAN PPM ECD-	
1 835	-25	0.0004	0.0012	0.0009	0.0001	0.0001	-----	----
1 845	-15	-----	-----	-----	-----	-----	0.48	0.0
1 853	-7	-----	-----	-----	-----	-----	-----	----
1 1350	290	-----	-----	-----	-----	-----	-----	----
1 1400	300	-----	-----	-----	-----	-----	0.71	0.0

CLOCK BY HR.	ELAPSED TIME (MIN)	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 845	-15	0.	0.	37.	0.	0.
1 1400	300	8347.	193.	-25.	7.	0.

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

S CC 23	METHANE PPM BK6800-1	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM PN-1	ACETYLEN PPM DMS-1	PROPANE PPM DMS-1
-----	1.36	0.0032	0.0039	0.0011	0.0012	0.0028	-----
1.38	-----	-----	-----	-----	-----	-----	-----
1.39	-----	-----	-----	-----	-----	-----	-----

I-C4= PPM DMS-1	CO PPM BK6800-1	PAN PPM ECD-3	HCHO PPM CA	ACETALD PPM 10'C-600	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023
0.0001	-----	-----	-----	0.0025	-----	-----
-----	0.48	0.000	-----	-----	-1169.	87.
-----	-----	-----	0.010	-----	-----	-----
-----	-----	-----	0.017	-----	-----	-----
-----	0.71	0.000	-----	-----	4509.	1.7E 04

422 PART.750
CC PART/CC
23 TSI-023

0.
0.

2

450
AFF- 92
JP-10, 4 DAY STATIC
1981 JUNE 16-19

DAY 1 (JUNE 16)

545: START FILL; WET: 6.0, DRY: 0.0, DEW PT.: 9.5, R.H.: 21%
703: END FILL.
729: INJECTED 6.2 ML. NO2
731: INJECTED 20.0 ML. NO.
733: INJECTED 400 ML. FREON 12.
738: INJECTED 624 MICROLITERS JP-10 USING HEAT GUN AND INJECTION BULB.
755: MIXED BAG.
900: UNCOVER BAG (T=0).

DAY 2 (JUNE 17)

800: START SAMPLING, PANALYZER DOWN - NO USEABLE PAN DATA.

DAY 3 (JUNE 18)

1430: STRONG GUSTS OF WIND; COVERED BAG WITH TEFLON COVER.

DAY 4 (JUNE 19)

805: FIRST SAMPLE.
828: START FILL; WET: 6.0, DRY: 0.0
836: INJECT 18.5 ML. NO AT 200 ML/MIN N2
INTO PURE AIR STREAM FOR 10 MINUTES.
846: INJECT 6.0 ML NO2, SAME AS NO INJECTION.
DILUTION FACTOR = 0.63
856: END FILL, END INJECTION.
857: MIX BAG.
1020: REMOVED TEFLON WIND COVER.
1510: RUN OVER, BAG COVERED AND DUMPED.

RESULTS	DAY 1	DAY 2	DAY 3	DAY 4
AVG.T(DEG.C)	44(+2)	44(+4)	41(+5)	40(+4)
AVG.UV(MW/CM2)	3.3(+0.9)	2.3(+1.0)	2.1(+0.6)	2.7(+0.8)

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	41.5	4.7	DEG C
UV RAD	EPPLEY	2.55	0.94	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.397	PPM
NO2-UNC	B-NOX-1	0.136	PPM
THC	BK6800-1	31.20	PPMC

AFF- 72
JP-10, 4 DAY STATIC
1981 JUNE 16-19

INSTRUMENTS USED			SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION	
1790	D-1790	DASIBI 1790 OZONE MONITOR	
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2	
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D	
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479	
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600; FID	
4130	EPPLEY	ARB LAB; EPPLEY 11592 UV RADIOMETER	
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030	
4350	CLIMET	CLIMET OPC MD:208 SN76-148	
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B	
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143	
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS	
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID	
2100	PN-1	RM 121; POROPAK N ; FID	
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID	
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID	

151

AFF- 92
 JP-10, 4 DAY STATIC
 1981 JUNE 16-19

CLOCK	ELAPSED	OZONE	NO	NO2-UNC	NOX-UNC	THC	JP-10	T
	TIME	PPM	PPM	PPM	PPM	PPMC	PPM	DEG
DY	HR.	(MIN)	B-1790	B-NOX-1	B-NOX-1	BK6800-1	VAR 3700	DORIC
1	705	-115	0.000	0.015	0.000	0.015	0.40	----- 28.
1	810	-50	-----	-----	-----	-----	1.988	-----
1	845	-15	0.000	0.397	0.136	0.520	31.20	----- 35.
1	1005	65	0.001	0.356	0.167	0.514	31.10	2.111 40.
1	1105	125	0.003	0.320	0.188	0.500	30.60	1.893 43.
1	1205	185	0.004	0.281	0.214	0.496	30.40	2.049 44.
1	1305	245	0.004	0.239	0.247	0.484	29.50	2.140 45.
1	1405	305	0.005	0.196	0.280	0.476	29.60	1.931 47.
1	1505	365	0.011	0.158	0.304	0.460	28.60	1.955 45.
1	1605	425	0.012	0.131	0.325	0.481	29.70	1.882 42.
2	800	1380	-----	-----	-----	-----	1.867	-----
2	805	1385	0.023	0.092	0.353	0.462	29.40	----- 36.
2	905	1445	0.032	0.075	0.342	0.437	29.50	1.938 39.
2	1005	1505	0.047	0.052	0.357	0.428	29.10	1.904 43.
2	1105	1565	0.073	0.030	0.380	0.411	-----	1.925 45.
2	1205	1625	0.116	0.022	0.361	0.390	-----	----- 46.
2	1305	1685	0.175	0.010	0.343	0.376	-----	1.788 47.
2	1405	1745	0.249	0.000	0.315	0.339	-----	1.853 47.
2	1505	1805	0.316	0.090	0.295	0.315	-----	1.742 45.
2	1605	1865	0.369	0.010	0.265	0.290	-----	1.731 42.
452	3	805	2825	0.206	0.019	0.029	0.045	25.20 1.620 30.
	3	905	2885	0.210	0.000	0.031	0.041	25.20 1.682 34.
	3	1005	2945	0.222	0.000	0.029	0.039	25.10 1.779 39.
	3	1105	3005	0.231	0.006	0.026	0.038	25.00 ----- 43.
	3	1205	3065	0.238	0.013	0.031	0.045	24.80 ----- 43.
	3	1305	3125	0.244	0.000	0.032	0.045	24.70 1.549 44.
	3	1405	3185	0.243	0.011	0.030	0.047	24.50 1.416 42.
	3	1505	3245	0.238	0.006	0.011	0.038	24.50 1.598 44.
	3	1605	3305	0.235	0.011	0.028	0.041	24.20 1.513 44.
	4	805	4265	0.176	0.019	0.030	0.045	24.20 1.800 33.
4	905	4325	0.015	0.133	0.370	0.502	15.30 -----	----- 35.
4	909	4329	-----	-----	-----	-----	-----	1.100 -----
4	1005	4385	0.025	0.101	0.390	0.391	15.40 -----	----- 40.
4	1009	4389	-----	-----	-----	-----	-----	1.064 -----
4	1105	4445	0.039	0.078	0.405	0.485	15.20 -----	----- 40.
4	1204	4504	-----	-----	-----	-----	-----	0.8470 -----
4	1205	4505	0.054	0.052	0.412	0.480	15.00 -----	----- 41.
4	1305	4565	0.076	0.038	0.422	0.468	15.00 -----	----- 43.
4	1308	4568	-----	-----	-----	-----	-----	0.7168 -----
4	1405	4625	0.102	0.030	0.417	0.449	14.70 -----	----- 42.
4	1408	4628	-----	-----	-----	-----	-----	0.9729 -----
4	1505	4685	0.118	0.022	0.405	0.433	14.60 -----	----- 41.
4	1508	4688	-----	-----	-----	-----	-----	0.9587 -----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

NC	THC PFMC	JP-10 PPM	T DEG C	UV RAD MW/CM2	*PART>.3 PART/CC CLIMET	*PART>.5 PART/CC CLIMET	*PART>1 PART/CC CLIMET
-1	BK6800-1	VAR 3700	RORIC-1	EPPLEY			
15	0.40	-----	28.8	-----	0.	0.	0.
--	-----	1.988	-----	-----	-----	-----	-----
20	31.20	-----	35.6	-----	0.	0.	0.
14	31.10	2.111	40.6	3.46	8.	0.	0.
600	30.60	1.893	43.4	4.45	70.	2.	0.
96	30.40	2.049	44.0	3.71	63.	21.	0.
84	29.50	2.140	45.3	4.00	53.	50.	1.
76	29.60	1.931	47.6	3.28	43.	42.	1.
60	28.60	1.955	45.4	2.63	34.	34.	1.
81	29.70	1.882	42.1	1.73	25.	25.	7.
--	-----	1.867	-----	-----	-----	-----	-----
62	29.40	-----	36.2	0.92	0.	0.	0.
37	29.50	1.938	39.2	1.95	1.	0.	0.
28	29.10	1.904	43.9	3.68	3.	2.	0.
11	-----	1.925	45.7	4.00	4.	3.	0.
90	-----	-----	46.3	1.90	5.	4.	2.
76	-----	1.788	47.0	-----	8.	6.	2.
39	-----	1.853	47.3	2.07	5.	13.	3.
315	-----	1.742	45.5	2.21	12.	14.	6.
290	-----	1.731	42.3	1.58	9.	14.	10.
45	25.20	1.620	30.9	1.66	6.	3.	0.
41	25.20	1.682	34.7	2.66	12.	1.	0.
39	25.10	1.779	39.5	2.71	11.	12.	1.
38	25.00	-----	43.0	2.93	282.	41.	2.
45	24.80	-----	43.5	2.16	262.	72.	2.
45	24.70	1.549	44.6	2.67	238.	116.	3.
47	24.50	1.416	42.6	1.70	190.	117.	3.
38	24.50	1.598	44.8	1.43	149.	98.	3.
41	24.20	1.513	44.5	1.01	128.	71.	3.
45	24.20	1.800	33.0	1.46	1.	1.	0.
502	15.30	-----	35.8	2.27	47.	1.	0.
--	-----	1.100	-----	-----	-----	-----	-----
391	15.40	-----	40.0	2.32	233.	35.	0.
--	-----	1.064	-----	-----	-----	-----	-----
485	15.20	-----	40.0	3.82	330.	80.	1.
--	-----	0.8470	-----	-----	-----	-----	-----
480	15.00	-----	41.5	3.19	311.	126.	5.
466	15.00	-----	43.0	3.55	269.	242.	17.
--	-----	0.7168	-----	-----	-----	-----	-----
449	14.70	-----	42.2	2.63	223.	227.	22.
--	-----	0.9729	-----	-----	-----	-----	-----
433	14.60	-----	41.7	2.00	181.	185.	16.
--	-----	0.9587	-----	-----	-----	-----	-----

AFF- 92
 JP-10, 4 DAY STATIC
 1981 JUNE 16-19

CLOCK	ELAPSED	BSCAT	AER.V	AER.N	AER.S	FREON 12	CO	PAN
TIME	TIME	10-4 M-1	UM3/CC	PART/CC	UM2/CC	RAW DATA	PPM	PPM
DY HR.	(MIN)	MRI 388	TSI 023	TSI 023	TSI 023	DMS-1	BK6800-1	ECD-1
1	705	-115	0.2	-0.	423.	-1.	-----	0.0
1	810	-50	-----	-----	-----	357.4	-----	-----
1	820	-40	-----	-----	-----	-----	-----	-----
1	845	-15	0.2	5.	1503.	36.	-----	1.16
1	1005	65	0.3	1.	1132.	19.	-----	1.19
1	1105	125	0.4	1.	781.	26.	-----	1.25
1	1200	180	-----	-----	-----	-----	-----	-----
1	1205	185	0.5	0.	637.	11.	-----	1.27
1	1305	245	0.4	3.	855.	35.	-----	1.26
1	1405	305	-----	2.	-2108.	15.	-----	1.30
1	1505	365	0.2	3.	405.	30.	-----	1.32
1	1600	420	-----	-----	-----	-----	-----	-----
1	1605	425	0.3	1.	847.	14.	355.3	1.38
2	805	1385	0.3	-1.	-2702.	-18.	373.2	1.39
2	810	1390	-----	-----	-----	-----	-----	-----
2	905	1445	0.3	1.	1960.	3.	-----	1.37
2	1005	1505	0.2	-6.	503.	-49.	-----	1.43
2	1105	1565	0.3	-1.	-231.	-3.	-----	1.44
2	1200	1620	-----	-----	-----	-----	-----	-----
2	1205	1625	0.4	-3.	775.	-24.	-----	-----
2	1305	1685	0.3	-4.	-206.	-22.	-----	-----
2	1405	1745	0.4	-1.	429.	-16.	-----	0.0
2	1505	1805	0.6	-9.	620.	-62.	-----	0.0
2	1600	1860	-----	-----	-----	-----	-----	-----
2	1605	1865	0.8	0.	1562.	28.	365.1	0.0
3	805	2825	1.0	-1.	2606.	50.	372.7	1.66
3	810	2830	-----	-----	-----	-----	-----	-----
3	905	2885	0.8	2.	4415.	71.	-----	1.60
3	1005	2945	1.6	4.	4708.	110.	-----	1.66
3	1105	3005	1.7	-3.	3921.	57.	-----	1.66
3	1200	3060	-----	-----	-----	-----	-----	-----
3	1205	3065	1.8	4.	2711.	96.	-----	1.74
3	1305	3125	1.6	-1.	1754.	49.	-----	1.70
3	1405	3185	1.2	-1.	2268.	49.	-----	1.79
3	1505	3245	1.0	5.	1329.	78.	-----	1.80
3	1600	3300	-----	-----	-----	-----	-----	-----
3	1605	3305	0.8	1.	741.	51.	357.4	1.77
4	752	4252	-----	-----	-----	-----	-----	-----
4	805	4265	0.2	1.	1982.	23.	373.2	1.86
4	905	4325	0.8	4.	4177.	100.	-----	2.07
4	906	4326	-----	-----	-----	235.0	-----	-----
4	922	4342	-----	-----	-----	-----	-----	-----
4	1005	4385	1.8	2.	3887.	108.	-----	2.08
4	1105	4445	2.5	10.	3784.	162.	-----	2.08
4	1200	4500	-----	-----	-----	-----	-----	-----
4	1205	4505	2.5	2.	3974.	107.	-----	1.99
4	1305	4565	2.0	3.	2923.	84.	-----	2.16
4	1405	4625	1.8	6.	1384.	98.	-----	2.09
4	1500	4680	-----	-----	-----	-----	-----	-----
4	1505	4685	1.5	1.	2469.	38.	235.8	2.20

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

R,S 2/CC 023	FREON 12 RAW DATA DMS-1	CO PPM BK6800-1	PAN PPM ECD-3	HCHO PPM CA	CONDENS 10E3/CC CNC-143	PART.024 PART/CC TSI 023	PART.042 PART/CC TSI 023
-1.	-----	-----	0.000	-----	0.0	334.	174.
-----	357.4	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.000	-----	-----	-----
36.	-----	1.16	0.000	-----	0.0	2505.	-1131.
19.	-----	1.19	0.000	-----	0.0	1002.	-174.
26.	-----	1.25	0.000	-----	0.0	167.	-174.
-----	-----	-----	-----	0.004	-----	-----	-----
11.	-----	1.27	0.000	-----	0.0	167.	0.
35.	-----	1.26	0.000	-----	0.0	668.	-87.
15.	-----	1.30	-----	-----	0.0	-2004.	-174.
30.	-----	1.32	0.000	-----	0.0	835.	-435.
-----	-----	-----	-----	0.008	-----	-----	-----
14.	355.3	1.38	0.000	-----	0.0	668.	0.
18.	373.2	1.39	0.000	-----	0.0	-2171.	-609.
-----	-----	-----	-----	0.015	-----	-----	-----
3.	-----	1.37	-----	-----	0.0	2672.	-1044.
49.	-----	1.43	0.005	-----	0.0	-167.	957.
-3.	-----	1.44	-----	-----	0.0	-501.	261.
-----	-----	-----	-----	0.025	-----	-----	-----
24.	-----	-----	-----	-----	0.0	1336.	-609.
22.	-----	-----	-----	-----	0.0	0.	-348.
16.	-----	-----	0.004	-----	0.0	0.	-231.
62.	-----	-----	0.004	-----	0.0	501.	-261.
-----	-----	-----	-----	0.038	-----	-----	-----
28.	365.1	-----	0.004	-----	0.0	167.	957.
50.	372.7	1.66	0.008	-----	0.0	-1002.	696.
-----	-----	-----	-----	0.044	-----	-----	-----
71.	-----	1.60	0.006	-----	0.0	1169.	-348.
10.	-----	1.66	0.002	-----	0.0	1169.	174.
57.	-----	1.66	-----	-----	0.0	0.	0.
-----	-----	-----	-----	0.038	-----	-----	-----
96.	-----	1.74	0.002	-----	0.0	-167.	87.
49.	-----	1.70	0.002	-----	0.0	-1169.	435.
49.	-----	1.79	0.003	-----	0.0	334.	261.
78.	-----	1.80	0.002	-----	0.0	0.	0.
-----	-----	-----	-----	0.031	-----	-----	-----
51.	357.4	1.77	-----	-----	0.0	0.	-870.
-----	-----	-----	-----	0.036	-----	-----	-----
23.	373.2	1.86	0.001	-----	0.3	835.	696.
100.	-----	2.07	0.001	-----	0.6	668.	261.
-----	235.0	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.019	-----	-----	-----
108.	-----	2.08	0.002	-----	0.5	-334.	609.
162.	-----	2.08	0.002	-----	0.3	-334.	-87.
-----	-----	-----	-----	0.021	-----	-----	-----
107.	-----	1.99	0.000	-----	0.2	334.	609.
84.	-----	2.16	0.001	-----	0.1	501.	522.
98.	-----	2.09	0.002	-----	0.1	-167.	87.
-----	-----	-----	-----	0.017	-----	-----	-----
38.	235.8	2.20	0.002	-----	0.1	1169.	696.

AFF- 92
JP-10, 4 DAY STATIC
1991 JUNE 16-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PART.075 PART/CC TSI 023	PART.133 PART/CC TSI 023	PART.237 PART/CC TSI 023	PART.422 PART/CC TSI 023	PART.750 PART/CC TSI 023
1 705	-115	-133.	72.	-25.	0.	0.
1 845	-15	0.	193.	-98.	13.	21.
1 1005	65	222.	72.	0.	7.	4.
1 1105	125	666.	96.	12.	13.	0.
1 1205	185	178.	241.	111.	-67.	7.
1 1305	245	178.	24.	62.	0.	11.
1 1405	305	44.	0.	12.	7.	7.
1 1505	365	-89.	48.	12.	27.	7.
1 1605	425	89.	0.	123.	-40.	7.
2 805	1385	44.	-24.	111.	-53.	0.
2 905	1445	311.	145.	-111.	-27.	14.
2 1005	1505	-133.	-145.	12.	7.	-28.
2 1105	1565	0.	0.	12.	0.	-4.
2 1205	1625	0.	120.	-61.	0.	-11.
2 1305	1685	222.	-72.	-37.	53.	-25.
2 1405	1745	932.	-265.	86.	-67.	4.
2 1505	1805	311.	145.	-37.	0.	-39.
2 1605	1865	266.	120.	25.	33.	-7.
3 805	2825	2353.	506.	123.	-67.	-4.
3 905	2885	2975.	627.	98.	-127.	21.
3 1005	2945	2842.	506.	-49.	67.	0.
3 1105	3005	3286.	723.	-86.	20.	-21.
3 1205	3065	2087.	699.	-12.	7.	11.
3 1305	3125	1954.	530.	25.	-13.	-7.
3 1405	3185	1066.	530.	61.	33.	-18.
3 1505	3245	888.	362.	62.	0.	18.
3 1605	3305	888.	723.	0.	0.	0.
4 805	4265	311.	72.	111.	-53.	11.
4 905	4325	2930.	241.	49.	20.	7.
4 1005	4385	2753.	795.	74.	-13.	4.
4 1105	4445	3952.	145.	37.	40.	32.
4 1205	4505	1909.	1109.	0.	13.	0.
4 1305	4565	977.	916.	0.	0.	7.
4 1405	4625	710.	699.	37.	-7.	25.
4 1505	4685	355.	217.	12.	20.	0.

----- NO DATA TAKEN

AFF- 93

RJ-4, 4-DAY STATIC
1981, JUNE 23-26

DAY 1 (JUNE 23)

0545: START FILL. WET: 6.0; DRY: 0.0; DEW POINT: 9.8C
0741: INJECTED 6.2 ML NO₂
0743: INJECTED 20.0 ML NO
0745: INJECTED 400 ML FREON 12
0751: INJECTED 624 MICROLITERS RJ-4
0900: UNCOVER BAG (T=0)
1610: SAMPLING OVER FOR DAY 1.

DAY 2 (JUNE 24)

0800: WEATHER: CLEAR, SUNNY, AND WARM. BAG HAS 80% OF ITS AIR
1610: SAMPLING ENDED

DAY 3 (JUNE 25)

0800: WEATHER: CLEAR, SUNNY
0805: BAG HAS BETWEEN 50-55% OF ITS AIR LEFT.
0828: START FILL. WET: 6.0; DRY: 0.0
0829: INJECTED 18.5 NO AT 200 ML/MIN N₂ INTO PURE AIR STREAM FOR 10 MINUTES
0839: INJECTED 6.0 ML NO₂, SAME METHOD AS FOR NO.
TOTAL DILUTION FACTOR DUE TO FILL = 0.72

1610: SAMPLING FINISHED

DAY 4 (JUNE 26)

0800: WEATHER: CLEAR, SUNNY. BAG HAS 75% OF ITS AIR LEFT.
1510: RUN OVER, BAG COVERED AND DUMPED.

RESULTS	DAY 1	DAY 2	DAY 3	DAY 4
AVG.T(DEG.C)	40(+-2)	40(+-4)	40(+-5)	39(+-4)
AVG UV(MW/CM ²)	3.0(+-0.7)	2.8(+-0.7)	2.7(+-0.8)	2.6(+-0.7)

T=0 AT 900 PST

PAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	39.0	4.6	DEG C
UV RAD	EPPLEY-2	2.73	0.72	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.400	PPM
NO ₂ -UNC	B-NOX-1	0.110	PPM
THC	BK6800-1	30.30	PPMC

AFF- 93
RJ-4, 4-DAY STATIC
1981, JUNE 23-26

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2100	PN-1	RM-12' POROPAK-N GC; FID
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:15508
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	RENDIX 8101BX NOX ANALYZER; SN300038-2
4850	EK6800-1	BECKMAN CO, HC ANALYZER SN:1000150
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
3000	CA	CHROMOTROFIC ACID HCHO ANALYSIS

AFF- 93

RJ-4, 4-DAY STATIC
1981, JUNE 23-26

CLOCK BY HR.	ELAPSED TIME (MIN)	OZONE D-1790	NO B-NOX-1	NO2-UNC B-NOX-1	NOX-UNC B-NOX-1	THC BK6800-1	T DEG C	UV MW/ EFPL
1 705	-115	0.000	0.015	0.000	0.015	0.58	25.7	---
1 835	-25	0.003	0.400	0.110	0.519	30.30	30.5	---
1 1005	65	0.005	0.335	0.175	0.500	30.30	36.2	2.
1 1105	125	0.011	0.260	0.225	0.483	30.10	39.7	3.
1 1205	185	0.015	0.185	0.278	0.460	29.10	40.5	3.
1 1305	245	0.030	0.095	0.335	0.430	29.30	43.1	3.
1 1405	305	0.068	0.040	0.380	0.415	28.60	42.8	3.
1 1505	365	0.132	0.012	0.350	0.365	28.00	40.7	2.
1 1605	425	0.212	0.010	0.320	0.340	27.20	38.8	1.
2 805	1385	0.189	0.010	0.010	0.025	23.60	31.2	1.
2 905	1445	0.188	0.015	0.003	0.025	23.50	34.3	2.
2 1005	1505	0.193	0.020	0.007	0.030	23.30	39.5	2.
2 1105	1565	0.198	0.017	0.011	0.030	23.40	42.0	3.
2 1205	1625	0.201	0.012	0.018	0.029	23.20	42.1	3.
2 1305	1685	0.202	0.015	0.015	0.030	23.00	43.5	3.
2 1405	1745	0.201	0.015	0.015	0.030	22.80	43.7	3.
2 1505	1805	0.201	0.015	0.015	0.025	22.70	42.7	2.
2 1605	1865	0.194	0.020	0.010	0.030	22.50	38.9	1.
3 805	2825	0.129	0.015	0.010	0.025	21.90	31.3	1.
3 905	2885	0.008	0.260	0.220	0.480	15.40	35.8	2.
3 1005	2945	0.016	0.165	0.290	0.455	15.20	35.8	2.
3 1105	3005	0.040	0.075	0.370	0.465	14.70	41.5	4.
3 1205	3065	0.115	0.025	0.395	0.420	14.30	42.7	3.
3 1305	3125	0.239	0.015	0.350	0.365	13.00	44.5	3.
3 1405	3185	0.415	0.015	0.260	0.285	12.30	44.3	2.
3 1505	3245	0.579	0.015	0.170	0.185	11.20	42.6	2.
3 1605	3305	0.654	0.015	0.095	0.110	9.76	40.0	1.
4 815	4275	0.475	0.020	0.020	0.040	8.92	32.0	1.
4 905	4325	0.462	0.015	0.025	0.040	8.83	34.0	2.
4 1005	4385	0.444	0.015	0.025	0.040	8.74	38.1	2.
4 1105	4445	0.426	0.010	0.030	0.040	8.57	40.0	3.
4 1205	4505	0.411	0.015	0.028	0.042	8.37	42.0	2.
4 1305	4565	0.399	0.010	0.030	0.040	8.29	43.3	3.
4 1405	4625	0.382	0.020	0.025	0.045	8.18	38.9	1.
4 1505	4685	0.363	0.010	0.030	0.040	8.17	40.7	2.

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

UNC M X-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	*PART>.3 PART/CC CLIMET	*PART>.5 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388
015	0.58	25.7	-----	0.0	0.	0.	0.3
519	30.30	30.5	-----	13.5	0.	0.	0.3
500	30.30	36.2	2.63	16.0	0.	0.	0.5
483	30.10	39.7	3.84	13.5	0.	0.	0.8
460	29.10	40.5	3.19	11.3	4.	0.	1.6
430	29.30	43.1	3.73	9.0	152.	4.	3.7
415	28.60	42.8	3.09	7.1	357.	95.	6.5
365	28.00	40.7	2.45	6.5	429.	228.	6.9
340	27.20	38.8	1.82	5.2	452.	307.	10.5
025	23.60	31.2	1.64	0.1	334.	213.	3.6
025	23.50	34.3	2.73	0.0	292.	256.	2.5
030	23.30	39.5	2.73	0.0	252.	252.	2.2
030	23.40	42.0	3.78	0.0	215.	217.	1.5
029	23.20	42.1	3.05	0.0	202.	178.	1.6
030	23.00	43.5	3.55	0.0	207.	143.	1.6
030	22.80	43.7	3.00	0.0	201.	7.	1.1
025	22.70	42.7	2.50	0.0	181.	111.	1.0
030	22.50	38.9	1.73	0.3	160.	101.	1.0
025	21.90	31.3	1.73	0.7	5.	3.	0.8
480	15.40	35.8	2.86	0.5	133.	9.	1.0
455	15.20	35.8	2.73	0.3	300.	67.	1.8
465	14.70	41.5	4.00	0.2	317.	161.	3.3
420	14.30	42.7	3.09	0.1	266.	272.	3.0
365	13.00	44.5	3.28	0.1	208.	213.	2.3
285	12.30	44.3	2.59	0.2	151.	145.	1.9
185	11.20	42.6	2.27	1.0	368.	200.	4.5
110	9.76	40.0	1.37	1.0	451.	290.	7.0
040	8.92	32.0	1.64	0.6	31.	20.	0.7
040	8.83	34.0	2.89	0.6	127.	22.	1.0
040	8.74	38.1	2.70	0.4	281.	61.	1.9
040	8.57	40.0	3.59	0.1	324.	94.	2.1
042	8.37	42.0	2.96	0.1	310.	164.	2.4
040	8.29	43.3	3.09	0.5	284.	205.	2.0
045	8.18	38.9	1.73	0.3	253.	184.	2.0
040	8.17	40.7	2.00	0.2	223.	157.	1.6

2

AFF- 93

RJ-4, 4-DAY STATIC
1981, JUNE 23-26

CLOCK	ELAPSED	AER,V	AER,N	AER,S	RJ-4(A)	RJ-4(B)	RJ-4(C)	RJ-4(D)
	TIME	UM3/CC	PART/CC	UM2/CC	PPMC	PPMC	PPMC	PPM
BY HR.	(MIN)	TSI-023	TSI-023	TSI-023	VAR 3700	VAR 3700	VAR 3700	VAR 3700
1	705	-115	-2.	-633.	-7.	-----	-----	-----
1	835	-25	-2.	1.2E 04	15.	1.229	0.904	1.277
1	1005	65	-3.	8.4E 04	577.	1.442	1.056	1.643
1	1105	125	13.	7.2E 04	918.	1.301	.071	1.440
1	1205	185	15.	6.5E 04	1101.	1.356	1.012	1.499
1	1305	245	24.	5.9E 04	1247.	-----	-----	-----
1	1405	305	27.	5.6E 04	1358.	1.203	0.902	1.299
1	1505	365	28.	4.8E 04	1407.	1.274	0.963	1.422
1	1605	425	24.	4.4E 04	1322.	1.285	0.975	1.430
2	805	1385	10.	3475.	155.	1.083	0.853	1.256
2	905	1445	6.	1831.	121.	1.128	0.893	1.296
2	1005	1505	0.	1634.	55.	-----	-----	-----
2	1105	1565	-0.	2039.	63.	1.080	0.855	1.264
2	1205	1625	2.	1898.	74.	1.055	0.846	1.225
2	1305	1685	-5.	1662.	18.	1.072	0.850	1.238
2	1405	1745	4.	1350.	82.	-----	-----	-----
2	1505	1805	1.	2242.	55.	1.035	0.833	1.206
2	1605	1865	9.	976.	102.	0.949	0.759	1.120
3	805	2825	18.	9157.	262.	0.992	0.797	1.173
3	905	2885	1.	1.0E 04	115.	0.714	0.573	0.886
3	1005	2945	6.	1.1E 04	185.	0.665	0.534	0.795
3	1105	3005	5.	5870.	141.	0.611	0.493	0.723
3	1205	3065	1.	5646.	107.	0.634	0.517	0.757
3	1305	3125	2.	8618.	101.	-----	-----	-----
3	1405	3185	2.	1.1E 04	97.	0.545	0.460	0.675
3	1505	3245	17.	1.1E 04	313.	0.481	0.406	0.604
3	1605	3305	10.	1.9E 04	418.	0.454	0.393	0.586
4	805	4265	-----	-----	-----	-----	-----	-----
4	815	4275	11.	3122.	166.	-----	-----	-----
4	905	4325	6.	4745.	116.	0.329	0.297	0.420
4	1005	4385	3.	4077.	128.	0.369	0.351	0.473
4	1105	4445	-1.	2630.	86.	0.360	0.325	0.475
4	1205	4505	7.	3186.	135.	0.334	0.304	0.446
4	1305	4565	7.	1824.	140.	-----	-----	-----
4	1405	4625	-5.	1211.	37.	0.304	0.294	0.398
4	1505	4685	11.	1900.	144.	0.299	0.276	0.391

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

	RJ-4(B) PPMC VAR 3700	RJ-4(C) PPMC VAR 3700	RJ-4(D) PPMC VAR 3700	RJ-4(E) PPMC VAR 3700	RJ-4(F) PPMC VAR 3700	RJ-4(G) PPMC VAR 3700	FREON 12 RAW DATA DMS-1
0	-----	-----	-----	-----	-----	-----	-----
1	0.904	1.277	1.365	0.342	1.236	1.412	380.9
2	1.058	1.643	1.728	4.308	2.084	2.422	-----
3	1.071	1.440	1.726	4.082	1.286	1.840	-----
4	1.012	1.499	1.591	3.939	1.384	2.064	-----
5	-----	-----	-----	-----	-----	-----	-----
6	0.902	1.299	1.374	3.390	1.218	1.645	-----
7	0.963	1.422	1.486	3.654	1.317	1.829	-----
8	0.975	1.430	1.501	3.639	1.347	1.813	366.6
9	-----	-----	-----	-----	-----	-----	-----
0	0.853	1.256	1.266	2.960	1.212	1.111	368.9
1	0.893	1.296	1.321	3.042	1.052	1.692	-----
2	-----	-----	-----	-----	-----	-----	-----
3	0.855	1.264	1.272	2.912	0.981	1.256	-----
4	0.846	1.225	1.236	2.806	0.972	1.219	-----
5	0.850	1.238	1.253	2.840	1.024	1.043	-----
6	-----	-----	-----	-----	-----	-----	-----
7	0.833	1.206	1.209	2.713	0.961	0.963	-----
8	0.759	1.120	1.146	2.490	0.909	0.875	372.7
9	-----	-----	-----	-----	-----	-----	-----
0	0.797	1.173	1.154	2.598	0.913	0.974	379.4
1	0.573	0.886	0.865	1.913	0.668	0.744	272.9
2	0.534	0.795	0.776	1.727	0.604	0.595	-----
3	0.493	0.723	0.709	1.569	0.588	0.544	-----
4	0.517	0.757	0.740	1.619	0.636	0.461	-----
5	-----	-----	-----	-----	-----	-----	-----
6	0.460	0.675	0.648	1.371	0.625	0.341	-----
7	0.406	0.604	0.565	1.154	0.625	0.562	-----
8	0.393	0.586	0.532	1.020	0.542	0.342	256.0
9	-----	-----	-----	-----	-----	-----	256.0
0	-----	-----	-----	-----	-----	-----	-----
1	0.297	0.420	0.365	0.672	0.346	0.207	-----
2	0.351	0.473	0.411	0.750	0.414	0.203	-----
3	0.325	0.475	0.405	0.734	0.410	0.205	-----
4	0.304	0.446	0.381	0.671	0.388	0.163	-----
5	-----	-----	-----	-----	-----	-----	-----
6	0.294	0.398	0.337	0.589	0.327	0.159	-----
7	0.276	0.391	0.331	0.574	0.370	0.144	270.8
8	-----	-----	-----	-----	-----	-----	-----
9	-----	-----	-----	-----	-----	-----	-----

J

AFF- 93
RJ-4, 4-DAY STATIC
1981, JUNE 23-26

CLOCK	ELAPSED	CO	PAN	HCHO	PART.024	PART.042	PART.075	PART.
TIME	TIME	PPM	PPM	PPM	PART/CC	PART/CC	PART/CC	PART/
BY HR.	(MIN)	BK6800-1	ECD-3	CA	TSI-023	TSI-023	TSI-023	TSI-0
1	705	-115	1.80	0.000	-----	334.	-1392.	355.
1	835	-25	1.82	0.000	-----	1.1E 04	696.	266.
1	841	-19	-----	-----	0.004	-----	-----	-----
1	1005	65	1.89	0.001	-----	2.3E 04	4.0E 04	2.0E 04
1	1105	125	1.73	0.001	-----	4843.	2.7E 04	3.8E 04
1	1200	180	-----	-----	0.021	-----	-----	-----
1	1205	185	1.90	0.001	-----	2171.	1.1E 04	4.9E 04
1	1305	245	1.88	0.000	-----	334.	3915.	5.0E 04
1	1405	305	1.91	0.002	-----	1169.	1392.	4.5E 04
1	1505	365	1.91	0.003	-----	-668.	522.	3.5E 04
1	1600	420	-----	-----	0.025	-----	-----	1.3E
1	1605	425	1.96	0.005	-----	-1503.	174.	3.2E 04
2	800	1380	-----	-----	0.046	-----	-----	-----
2	805	1385	2.00	0.006	-----	501.	348.	1199.
2	905	1445	2.00	0.005	-----	-501.	174.	977.
2	1005	1505	2.04	0.004	-----	-167.	-261.	1066.
2	1105	1565	2.07	0.003	-----	334.	-174.	1021.
2	1200	1620	-----	-----	0.050	-----	-----	-----
2	1205	1625	2.10	0.002	-----	334.	0.	488.
2	1305	1685	2.12	0.002	-----	-334.	87.	977.
2	1405	1745	2.13	0.002	-----	167.	-348.	710.
2	1505	1805	2.16	0.003	-----	1002.	-87.	666.
2	1600	1860	-----	-----	0.021	-----	-----	-----
2	1605	1865	2.02	0.003	-----	-668.	609.	622.
3	800	2820	-----	-----	0.052	-----	-----	-----
3	805	2825	2.25	0.004	-----	2338.	1914.	4262.
3	905	2885	2.24	0.002	-----	2171.	3219.	3952.
3	910	2890	-----	-----	0.040	-----	-----	-----
3	1005	2945	2.11	0.002	-----	4342.	1914.	3552.
3	1105	3005	2.23	0.002	-----	1169.	1305.	2042.
3	1200	3060	-----	-----	0.031	-----	-----	-----
3	1205	3065	2.26	0.004	-----	1670.	783.	2131.
3	1305	3125	2.34	0.006	-----	3006.	2871.	2087.
3	1405	3185	2.36	0.013	-----	5177.	1740.	3286.
3	1505	3245	2.34	0.022	-----	2839.	1653.	4085.
3	1600	3300	-----	-----	0.073	-----	-----	-----
3	1605	3305	2.40	0.030	-----	3173.	4350.	7015.
4	800	4260	-----	-----	0.073	-----	-----	-----
4	815	4275	2.50	0.010	-----	167.	0.	2620.
4	905	4325	2.53	0.011	-----	1002.	-87.	2531.
4	1005	4385	2.53	0.011	-----	0.	696.	1909.
4	1105	4445	2.50	0.010	-----	-668.	87.	1643.
4	1200	4500	-----	-----	0.069	-----	-----	-----
4	1205	4505	2.61	0.010	-----	835.	-435.	1243.
4	1305	4565	2.54	0.009	-----	-835.	435.	844.
4	1405	4625	2.69	0.010	-----	-501.	174.	488.
4	1500	4680	-----	-----	0.077	-----	-----	-----
4	1505	4685	2.70	0.010	-----	835.	-522.	755.

----- NO DATA TAKEN

12 NOV 1981

PAGE 5

	PART,042 PART/CC TSI-023	PART,075 PART/CC TSI-023	PART,133 PART/CC TSI-023	PART,237 PART/CC TSI-023	PART,422 PART/CC TSI-023	PART,750 PART/CC TSI-023
24	-1392.	355.	72.	-12.	20.	-11.
C	696.	266.	-241.	86.	7.	-11.
3	-----	-----	-----	-----	-----	-----
04	4.0E 04	2.0E 04	458.	74.	27.	-53.
.	2.7E 04	3.8E 04	1277.	-61.	7.	7.
.	-----	-----	-----	-----	-----	-----
.	1.1E 04	4.9E 04	2362.	37.	60.	-7.
.	3915.	5.0E 04	4868.	123.	0.	25.
.	1392.	4.5E 04	8845.	49.	20.	25.
.	522.	3.5E 04	1.3E 04	172.	7.	14.
.	-----	-----	-----	-----	-----	-----
.	174.	3.2E 04	1.3E 04	135.	-7.	0.
.	-----	-----	-----	-----	-----	-----
.	348.	1199.	1446.	-37.	-20.	39.
.	174.	977.	1036.	148.	-20.	18.
.	-261.	1066.	1012.	25.	-40.	0.
.	-174.	1021.	819.	12.	40.	-14.
.	-----	-----	-----	-----	-----	-----
.	0.	488.	1084.	-12.	0.	4.
.	87.	977.	1012.	-49.	-7.	-25.
.	-348.	710.	843.	-86.	60.	4.
.	-87.	666.	627.	61.	-7.	0.
.	-----	-----	-----	-----	-----	-----
.	609.	622.	217.	221.	-67.	42.
.	-----	-----	-----	-----	-----	-----
3.	1914.	4262.	458.	98.	20.	67.
1.	3219.	3952.	1012.	-61.	-73.	11.
.	-----	-----	-----	-----	-----	-----
2.	1914.	3552.	1326.	74.	-13.	14.
4.	1305.	2042.	1374.	-25.	-13.	18.
.	-----	-----	-----	-----	-----	-----
0.	783.	2131.	1012.	37.	20.	-7.
6.	2871.	2087.	651.	0.	0.	4.
7.	1740.	3286.	458.	-12.	-40.	11.
9.	1653.	4085.	2482.	25.	-60.	67.
3.	4350.	7015.	4386.	-12.	7.	11.
.	-----	-----	-----	-----	-----	-----
7.	0.	2620.	-24.	344.	-27.	42.
2.	-87.	2531.	1470.	-86.	-127.	42.
0.	696.	1909.	1446.	12.	13.	0.
8.	87.	1643.	1591.	25.	-40.	-7.
.	-----	-----	-----	-----	-----	-----
5.	-435.	1243.	1639.	-111.	-13.	28.
35.	435.	844.	1301.	25.	40.	14.
01.	174.	488.	1133.	-197.	167.	-53.
.	-----	-----	-----	-----	-----	-----
35.	-522.	755.	819.	-86.	60.	39.

J

AFF- 94
JP-10 VERSUS RJ-4
1981 JUNE 30

DAY 1 (JUNE 30)

0445: START FILL. WET: 6.0; DRY: 0.0; DEW POINT 10.6C; RH=34%
0628: INJECTED 5.0 ML NO2
0630: INJECTED 18.0 ML NO
0633: DIVIDE BAG.
0646: INJECTED 312 MICROLITERS RJ-4 INTO SIDE B.
0707: INJECTED 312 MICROLITERS JP-10 INTO SIDE A.
0900: UNCOVER BAG (T=0)
0905: WEATHER: CLEAR AND SUNNY.
1630: BAG COVERED FOR THE NIGHT
DAY 2 (JULY 1)
0900: UNCOVERED BAG
1500: END OF RUN.

RESULTS	DAY 1	DAY 2
Avg.T(DEG.C)	39(+2)	37(+5)
Avg.UV(MW/CM2)	3.0(+0.8)	3.1(+0.5)

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	34.8	6.2	DEG C
T	DORIC-1	36.0	6.7	DEG C
UV RAD	EPPLEY-2	3.02	0.66	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.380	PPM
NO	B-NOX-1	0.345	PPM
NO2-UNC	B-NOX-1	0.120	PPM
NO2-UNC	B-NOX-1	0.150	PPM
THC	BK6800-1	36.80	PPMC
THC	BK6800-1	35.60	PPMC

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12% 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID

AFF- 94
JP-10 VERSUS RJ-4
1981 JUNE 30

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-i	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-L PPM B-NOX
1 605	-175	0.000	0.000	0.005	0.005	0.000	0.000	0.000
1 835	-25	0.002	-----	0.380	-----	0.120	-----	0.4
1 845	-15	-----	0.000	-----	0.345	-----	0.150	-----
1 1005	65	0.004	-----	0.315	-----	0.180	-----	0.4
1 1015	75	-----	0.009	-----	0.225	-----	0.200	-----
1 1105	125	0.006	-----	0.255	-----	0.230	-----	0.4
1 1115	135	-----	0.015	-----	0.070	-----	0.115	-----
1 1205	185	0.010	-----	0.190	-----	0.280	-----	0.4
1 1215	195	-----	0.037	-----	0.045	-----	0.155	-----
1 1305	245	0.021	-----	0.130	-----	0.330	-----	0.4
1 1315	255	-----	0.101	-----	0.020	-----	0.165	-----
1 1405	305	0.034	-----	0.080	-----	0.380	-----	0.4
1 1415	315	-----	0.227	-----	0.015	-----	0.185	-----
1 1505	365	0.053	-----	0.045	-----	0.410	-----	0.4
1 1515	375	-----	0.370	-----	0.015	-----	0.125	-----
1 1605	425	0.070	-----	0.030	-----	0.410	-----	0.4
1 1615	435	-----	0.472	-----	0.005	-----	0.090	-----
2 835	1415	0.012	-----	0.020	-----	0.320	-----	0.3
2 845	1425	-----	0.289	-----	0.015	-----	0.015	-----
2 1005	1505	0.077	-----	0.025	-----	0.295	-----	0.3
2 1015	1515	-----	0.268	-----	0.015	-----	0.050	-----
2 1105	1565	0.141	-----	0.020	-----	0.285	-----	0.3
2 1115	1575	-----	0.262	-----	0.010	-----	0.055	-----
2 1205	1625	0.216	-----	0.015	-----	0.270	-----	0.2
2 1215	1635	-----	0.259	-----	0.010	-----	0.040	-----
2 1305	1685	0.318	-----	0.010	-----	0.250	-----	0.2
2 1315	1695	-----	0.256	-----	0.010	-----	0.040	-----
2 1405	1745	0.415	-----	0.015	-----	0.215	-----	0.2
2 1415	1755	-----	0.247	-----	0.015	-----	0.045	-----
2 1505	1805	0.495	-----	0.005	-----	0.185	-----	0.1
2 1515	1815	-----	0.238	-----	0.010	-----	0.040	-----

----- NO DATA TAKEN

12 NOV 1981

PAGE 2

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0.000	0.000	0.015	0.015	0.11	0.11
0.120	-----	0.490	-----	36.80	-----
-----	0.150	-----	0.490	-----	35.60
0.180	-----	0.495	-----	38.20	-----
-----	0.200	-----	0.238	-----	35.50
0.230	-----	0.485	-----	37.50	-----
-----	0.115	-----	0.190	-----	35.20
0.280	-----	0.470	-----	36.90	-----
-----	0.155	-----	0.200	-----	34.30
0.330	-----	0.460	-----	36.60	-----
-----	0.135	-----	0.185	-----	33.70
0.380	-----	0.460	-----	36.40	-----
-----	0.185	-----	0.200	-----	32.20
0.410	-----	0.455	-----	34.90	-----
-----	0.125	-----	0.140	-----	30.90
0.410	-----	0.440	-----	35.80	-----
-----	0.090	-----	0.100	-----	29.10
0.320	-----	0.340	-----	34.00	-----
-----	0.015	-----	0.030	-----	27.10
0.295	-----	0.320	-----	34.00	-----
-----	0.050	-----	0.065	-----	26.60
0.285	-----	0.310	-----	33.50	-----
-----	0.055	-----	0.065	-----	26.50
0.270	-----	0.285	-----	33.60	-----
-----	0.040	-----	0.050	-----	26.80
0.250	-----	0.260	-----	33.20	-----
-----	0.040	-----	0.050	-----	26.50
0.215	-----	0.230	-----	32.20	-----
-----	0.045	-----	0.060	-----	26.30
0.185	-----	0.190	-----	32.00	-----
-----	0.040	-----	0.050	-----	26.00

2

AFF- 94
 JP-10 VERSUS RJ-4
 1981 JUNE 30

CLOCK BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE
		T DEG C	DORIC-1	T DEG C	DCRIC-1	UV RAD MW/CM2	CONDENS 10E3/CC	CONDENS 10E3/CC	PART/CC CNC-143	PART/CC CNC-143	#PART>.3 CLIMET	PART. CLI
1	605	-175	20.3	20.3	-----	-----	0.0	0.0	-----	0.	-----	0.
1	835	-25	28.9	-----	-----	-----	0.4	-----	-----	0.	-----	-----
1	845	-15	-----	28.0	-----	-----	-----	15.0	-----	-----	-----	-----
1	1005	65	34.1	-----	2.82	0.7	-----	-----	-----	86.	-----	-----
1	1015	75	-----	35.1	3.82	-----	13.0	-----	-----	-----	-----	6
1	1105	125	37.4	-----	3.66	0.6	-----	10.5	-----	254.	-----	-----
1	1115	135	-----	38.9	3.66	-----	-----	10.5	-----	-----	30	-----
1	1205	185	39.4	-----	2.93	0.5	-----	-----	-----	361.	-----	-----
1	1215	195	-----	39.6	3.55	-----	8.8	-----	-----	281	-----	-----
1	1305	245	39.5	-----	3.79	0.4	-----	390.	-----	-----	410	-----
1	1315	255	-----	39.6	3.69	-----	7.5	-----	-----	-----	-----	410
1	1405	305	40.4	-----	3.02	0.3	-----	360.	-----	-----	450	-----
1	1415	315	-----	42.5	2.96	-----	6.0	-----	-----	312.	-----	-----
1	1505	365	39.8	-----	2.50	0.3	-----	-----	-----	470	-----	-----
1	1515	375	-----	42.6	2.36	-----	4.8	-----	-----	-----	-----	470
1	1605	425	37.4	-----	1.59	0.1	-----	262.	-----	-----	-----	-----
1	1615	435	-----	38.3	1.50	-----	3.8	-----	-----	490	-----	-----
452	2	835	1415	25.5	-----	-----	0.2	-----	-----	4.	-----	-----
	2	845	1425	-----	25.2	-----	-----	0.1	-----	-----	16	-----
	2	1005	1505	26.4	-----	2.14	0.0	-----	-----	11.	-----	-----
	2	1015	1515	-----	29.5	3.28	-----	0.6	-----	120	-----	-----
	2	1105	1565	34.2	-----	3.55	0.0	-----	-----	17.	-----	-----
	2	1115	1575	-----	35.8	3.58	-----	0.6	-----	200	-----	-----
	2	1205	1625	37.5	-----	2.63	0.0	-----	-----	68.	-----	-----
	2	1215	1635	-----	38.0	3.64	-----	0.5	-----	320	-----	-----
	2	1305	1685	38.7	-----	3.55	0.1	-----	-----	119.	-----	-----
	2	1315	1695	-----	40.6	3.46	-----	0.5	-----	360	-----	-----
	2	1405	1745	38.6	-----	2.91	0.2	-----	-----	177.	-----	-----
	2	1415	1755	-----	40.2	2.82	-----	0.3	-----	330	-----	-----
	2	1505	1805	38.9	-----	2.54	0.3	-----	-----	233.	-----	-----
	2	1515	1815	-----	42.4	2.45	-----	0.2	-----	280	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0	0.0	0.	0.	0.	0.	0.	0.
4	-----	0.	-----	0.	-----	0.	-----
8	15.0	-----	1.	-----	0.	-----	0.
12	-----	86.	-----	2.	-----	0.	-----
16	13.0	-----	0.	-----	0.	-----	0.
20	-----	254.	-----	46.	-----	0.	-----
24	10.5	-----	32.	-----	0.	-----	0.
28	-----	361.	-----	99.	-----	2.	-----
32	8.8	-----	282.	-----	33.	-----	0.
36	-----	390.	-----	120.	-----	6.	-----
40	7.5	-----	416.	-----	193.	-----	9.
44	-----	360.	-----	216.	-----	13.	-----
48	6.0	-----	456.	-----	314.	-----	65.
52	-----	312.	-----	310.	-----	34.	-----
56	4.8	-----	475.	-----	367.	-----	120.
60	-----	262.	-----	269.	-----	31.	-----
64	3.8	-----	495.	-----	394.	-----	149.
68	-----	4.	-----	3.	-----	0.	-----
72	0.1	-----	169.	-----	95.	-----	1.
76	-----	11.	-----	7.	-----	2.	-----
80	0.6	-----	120.	-----	117.	-----	4.
84	-----	17.	-----	12.	-----	3.	-----
88	0.6	-----	200.	-----	96.	-----	5.
92	-----	68.	-----	39.	-----	7.	-----
96	0.5	-----	325.	-----	124.	-----	11.
100	-----	119.	-----	95.	-----	16.	-----
104	0.5	-----	362.	-----	134.	-----	14.
108	-----	177.	-----	118.	-----	35.	-----
112	0.3	-----	333.	-----	171.	-----	14.
116	-----	233.	-----	162.	-----	42.	-----
120	0.2	-----	282.	-----	207.	-----	14.

Z

AFF- 94
 JP-10 VERSUS RJ-4
 1981 JUNE 30

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER UM2/ TSI-023
1 605	-175	0.3	0.3	13.	13.	-1026.	-1026.	110
1 835	-25	0.5	-----	2.	-----	1851.	-----	16
1 845	-15	-----	0.7	-----	0.	-----	4.7E 04	-----
1 1005	65	2.7	-----	6.	-----	5365.	-----	130
1 1015	75	-----	2.1	-----	4.	-----	6.7E 04	-----
1 1105	125	2.7	-----	-1.	-----	5157.	-----	16
1 1115	135	-----	0.9	-----	30.	-----	6.3E 04	-----
1 1205	185	4.5	-----	13.	-----	4268.	-----	22
1 1215	195	-----	1.3	-----	30.	-----	5.9E 04	-----
1 1305	245	4.4	-----	5.	-----	3898.	-----	15
1 1315	255	-----	0.9	-----	27.	-----	5.6E 04	-----
1 1405	305	4.3	-----	-1.	-----	5658.	-----	12
1 1415	315	-----	0.8	-----	35.	-----	5.4E 04	-----
1 1505	365	3.8	-----	-20.	-----	-236.	-----	6
1 1515	375	-----	0.7	-----	34.	-----	4.6E 04	-----
1 1605	425	3.0	-----	-1.	-----	746.	-----	7
1 1615	435	-----	0.9	-----	33.	-----	3.7E 04	-----
2 835	1415	0.5	-----	1.	-----	-898.	-----	-----
2 845	1425	-----	1.7	-----	8.	-----	807.	-----
2 1005	1505	0.5	-----	-1.	-----	-626.	-----	-1
2 1015	1515	-----	0.6	-----	13.	-----	3454.	-----
2 1105	1565	0.5	-----	-0.	-----	266.	-----	-----
2 1115	1575	-----	0.9	-----	6.	-----	4573.	-----
2 1205	1625	1.0	-----	1.	-----	185.	-----	2
2 1215	1635	-----	0.5	-----	8.	-----	4393.	-----
2 1305	1685	1.3	-----	7.	-----	-233.	-----	7
2 1315	1695	-----	0.5	-----	1.	-----	4137.	-----
2 1405	1745	2.3	-----	0.	-----	1312.	-----	4
2 1415	1755	-----	0.4	-----	4.	-----	3452.	-----
2 1505	1805	2.5	-----	-0.	-----	2715.	-----	6
2 1515	1815	-----	0.5	-----	4.	-----	2606.	-----

----- NO DATA TAKEN

463

12 NOV 1981
PAGE 4

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 2 RJ-4(A) PPMC	SIDE 2 RJ-4(B) PPMC	SIDE 2 RJ-4(C) PPMC
-1026.	-1026.	110.	110.	-----	-----	-----
1851.	-----	16.	-----	-----	-----	-----
-----	4.7E 04	-----	154.	-----	-----	-----
5365.	-----	138.	-----	-----	-----	-----
-----	6.7E 04	-----	804.	-----	-----	-----
5157.	-----	167.	-----	-----	-----	-----
-----	6.3E 04	-----	1329.	1.492	1.078	1.595
4268.	-----	229.	-----	-----	-----	-----
-----	5.9E 04	-----	1505.	-----	-----	-----
3898.	-----	159.	-----	-----	-----	-----
-----	5.6E 04	-----	1552.	1.380	1.001	1.469
5658.	-----	123.	-----	-----	-----	-----
-----	5.4E 04	-----	1637.	-----	-----	-----
-236.	-----	67.	-----	-----	-----	-----
-----	4.6E 04	-----	1583.	-----	-----	-----
746.	-----	78.	-----	-----	-----	-----
-----	3.7E 04	-----	1485.	1.265	0.965	1.393
-898.	-----	1.	-----	-----	-----	-----
-----	807.	-----	90.	1.194	0.904	1.328
-626.	-----	14.	-----	-----	-----	-----
-----	3454.	-----	182.	-----	-----	-----
266.	-----	4.	-----	-----	-----	-----
-----	4573.	-----	173.	1.162	0.888	1.297
185.	-----	21.	-----	-----	-----	-----
-----	4393.	-----	206.	-----	-----	-----
-233.	-----	75.	-----	-----	-----	-----
-----	4137.	-----	150.	1.161	0.898	1.307
1312.	-----	47.	-----	-----	-----	-----
-----	3452.	-----	145.	-----	-----	-----
2715.	-----	64.	-----	-----	-----	-----
-----	2606.	-----	122.	1.098	0.846	1.202

2

464
AFF- 94
JP-10 VERSUS RJ-4
1981 JUNE 30

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 2 RJ-4(D) PPMC	SIDE 2 RJ-4(E) PPMC	SIDE 2 RJ-4(F) PPMC	SIDE 2 RJ-4(G) PPMC	SIDE 1 JP-10 PPM VAR 3700	SIDE 1 CO PPM BK6800-1	SII C PP BK68
		-----	-----	-----	-----	-----	1.78	1.
1 605	-175	-----	-----	-----	-----	-----	-----	-----
1 735	-85	-----	-----	-----	-----	2.076	-----	-----
1 820	-40	-----	-----	-----	-----	-----	-----	-----
1 835	-25	-----	-----	-----	-----	-----	1.78	-----
1 845	-15	-----	-----	-----	-----	-----	-----	1.
1 1005	65	-----	-----	-----	-----	2.338	1.78	-----
1 1015	75	-----	-----	-----	-----	-----	-----	1.
1 1105	125	-----	-----	-----	-----	-----	1.76	-----
1 1115	135	1.694	4.145	1.333	1.559	-----	-----	1.
1 1200	180	-----	-----	-----	-----	-----	-----	-----
1 1205	185	-----	-----	-----	-----	1.959	1.85	-----
1 1215	195	-----	-----	-----	-----	-----	-----	1.
1 1305	245	-----	-----	-----	-----	-----	1.68	-----
1 1315	255	1.552	3.792	1.204	1.573	-----	-----	1.
1 1405	305	-----	-----	-----	-----	-----	1.85	-----
1 1415	315	-----	-----	-----	-----	-----	-----	1.
1 1505	365	-----	-----	-----	-----	2.006	1.85	-----
1 1515	375	-----	-----	-----	-----	-----	-----	1.
1 1605	425	-----	-----	-----	-----	-----	1.89	-----
1 1610	430	-----	-----	-----	-----	-----	-----	-----
1 1615	435	1.456	3.452	1.050	1.385	-----	-----	1.
2 730	1350	-----	-----	-----	-----	2.298	-----	-----
2 820	1400	-----	-----	-----	-----	-----	-----	-----
2 835	1415	-----	-----	-----	-----	-----	1.93	-----
2 845	1425	1.363	3.181	0.932	1.559	-----	-----	1.
2 1005	1505	-----	-----	-----	-----	2.162	1.95	-----
2 1015	1515	-----	-----	-----	-----	-----	-----	2.
2 1105	1565	-----	-----	-----	-----	-----	1.98	-----
2 1115	1575	1.329	3.063	0.889	0.969	-----	-----	2.
2 1200	1620	-----	-----	-----	-----	-----	-----	-----
2 1205	1625	-----	-----	-----	-----	2.113	1.91	-----
2 1215	1635	-----	-----	-----	-----	-----	-----	2.
2 1305	1685	-----	-----	-----	-----	-----	2.00	-----
2 1315	1695	1.332	3.043	0.879	1.446	-----	-----	2.
2 1405	1745	-----	-----	-----	-----	2.004	2.01	-----
2 1415	1755	-----	-----	-----	-----	-----	-----	2.
2 1505	1805	-----	-----	-----	-----	-----	2.04	-----
2 1515	1815	1.220	2.743	0.805	0.897	-----	-----	2.
2 1610	1870	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

E 2 (G)	SIDE 1 JF-10 PPM VAR 3700	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
	-----	1.78	1.78	0.000	0.000	-----	-----
	2.076	-----	-----	-----	-----	-----	-----
	-----	-----	-----	0.000	-----	0.016	0.016
	-----	1.78	-----	0.000	0.005	-----	-----
	2.338	1.78	-----	0.002	-----	-----	-----
	-----	-----	1.78	-----	0.001	-----	-----
	-----	1.76	-----	0.001	-----	-----	-----
559	-----	-----	1.83	-----	0.005	-----	-----
	-----	-----	-----	-----	-----	0.023	0.017
	1.959	1.85	-----	0.002	-----	-----	-----
	-----	-----	1.86	-----	0.011	-----	-----
	-----	1.68	-----	0.002	-----	-----	-----
573	-----	-----	1.86	-----	0.006	-----	-----
	-----	1.85	-----	0.002	-----	-----	-----
	-----	-----	1.92	-----	0.005	-----	-----
	2.006	1.85	-----	0.000	-----	-----	-----
	-----	-----	1.93	-----	0.008	-----	-----
	-----	1.89	-----	0.003	-----	-----	-----
	-----	-----	-----	-----	-----	0.027	0.042
385	-----	-----	1.93	-----	0.012	-----	-----
	-----	2.292	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.033	0.038
	-----	1.93	-----	0.006	-----	-----	-----
559	-----	-----	1.94	-----	0.000	-----	-----
	-----	2.162	1.95	-----	0.007	-----	-----
	-----	-----	2.08	-----	0.008	-----	-----
	-----	1.98	-----	0.006	-----	-----	-----
969	-----	-----	2.01	-----	0.009	-----	-----
	-----	-----	-----	-----	-----	0.025	0.027
	2.113	1.91	-----	0.008	-----	-----	-----
	-----	-----	2.10	-----	0.009	-----	-----
	-----	2.00	-----	0.010	-----	-----	-----
446	-----	-----	2.12	-----	0.009	-----	-----
	-----	2.004	2.01	-----	0.012	-----	-----
	-----	-----	2.02	-----	0.007	-----	-----
	-----	2.04	-----	0.013	-----	-----	-----
897	-----	-----	2.18	-----	0.006	-----	-----
	-----	-----	-----	-----	-----	0.029	0.031

Z

AFF- 94

JP-10 VERSUS RJ-4
1981 JUNE 30

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		ACETALD PPM 10'C-600	ACETALD PPM 10'C-600	ACETONE PPM 10'C-600	ACETONE PPM 10'C-600	PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023
1 605	-175	0.0025	0.0025	0.0004	0.0004	-668.	-668.			
1 735	-85	0.0045	-----	0.0009	-----	-----	-----			
1 835	-25	-----	-----	-----	-----	1837.	-----			
1 845	-15	-----	0.0391 A	-----	0.0024 A	-----	3.9E 04			
1 915	15	-----	0.0433 A	-----	0.0058 A	-----	-----			
1 1005	65	-----	-----	-----	-----	501.	-----			
1 1015	75	-----	-----	-----	-----	-----	5678.			
1 1105	125	-----	-----	-----	-----	334.	-----			
1 1115	135	-----	-----	-----	-----	-----	4175.			
1 1205	185	-----	-----	-----	-----	167.	-----			
1 1215	195	-----	-----	-----	-----	-----	3340.			
1 1305	245	-----	-----	-----	-----	501.	-----			
1 1315	255	-----	-----	-----	-----	-----	3507.			
1 1405	305	-----	-----	-----	-----	2004.	-----			
1 1415	315	-----	-----	-----	-----	-----	7181.			
1 1505	365	0.0158	-----	0.0043	-----	-3006.	-----			
1 1515	375	-----	-----	-----	-----	-----	5845.			
1 1605	425	-----	0.0199	-----	0.0098	-1169.	-----			
1 1615	435	-----	-----	-----	-----	-----	501.			
465	2 715	1335	0.0082	-----	0.0034	-----	-----	-----		
	2 835	1415	-----	-----	-----	-----	-1837.	-----		
	2 845	1425	-----	0.0247	-----	0.0077	-----	-501.	-----	
	2 1005	1505	-----	-----	-----	-----	-668.	-----		
	2 1015	1515	-----	-----	-----	-----	-----	-668.	-----	
	2 1105	1565	-----	-----	-----	-----	167.	-----		
	2 1115	1575	-----	-----	-----	-----	-----	-334.	-----	
	2 1205	1625	-----	-----	-----	-----	-1002.	-----		
	2 1215	1635	-----	-----	-----	-----	-----	167.	-----	
	2 1305	1685	-----	-----	-----	-----	-668.	-----		
	2 1315	1695	-----	-----	-----	-----	-----	-167.	-----	
	2 1405	1745	0.0239	-----	-----	-----	167.	-----		
	2 1415	1755	-----	-----	-----	-----	-----	334.	-----	
	2 1505	1805	-----	-----	-----	-----	1002.	-----		
	2 1515	1815	-----	0.0291	-----	0.0090	-----	0.	-----	

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
2	PART.024	PART.024	PART.042	PART.042	PART.075	PART.075
NE	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
600	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
4	-668.	-668.	348.	348.	-1110.	-1110.
-----	-----	-----	-----	-----	-----	-----
-----	1837.	-----	0.	-----	-89.	-----
24 A	-----	3.9E 04	-----	6003.	-----	1909.
58 A	-----	-----	-----	-----	-----	-----
-----	501.	-----	87.	-----	3952.	-----
-----	5678.	-----	2.3E 04	-----	3.6E 04	-----
-----	334.	-----	-174.	-----	2620.	-----
-----	4175.	-----	4437.	-----	4.8E 04	-----
-----	167.	-----	-87.	-----	1909.	-----
-----	3340.	-----	1044.	-----	4.3E 04	-----
-----	501.	-----	174.	-----	710.	-----
-----	3507.	-----	1131.	-----	3.5E 04	-----
-----	2004.	-----	870.	-----	400.	-----
-----	7181.	-----	-1479.	-----	2.9E 04	-----
-----	-3006.	-----	522.	-----	355.	-----
-----	5845.	-----	-1740.	-----	2.0E 04	-----
98	-1169.	-----	609.	-----	-266.	-----
-----	-----	501.	-----	2001.	-----	1.3E 04
-----	-----	-----	-----	-----	-----	-----
-----	-1837.	-----	1044.	-----	-400.	-----
77	-----	-501.	-----	696.	-----	-622.
-----	-668.	-----	-87.	-----	0.	-----
-----	-668.	-----	1218.	-----	2131.	-----
-----	167.	-----	-87.	-----	0.	-----
-----	-334.	-----	174.	-----	2842.	-----
-----	-1002.	-----	957.	-----	44.	-----
-----	167.	-----	-348.	-----	2087.	-----
-----	-668.	-----	-522.	-----	577.	-----
-----	-167.	-----	435.	-----	1465.	-----
-----	167.	-----	-174.	-----	577.	-----
-----	334.	-----	87.	-----	888.	-----
90	1002.	-----	-87.	-----	533.	-----
-----	0.	-----	348.	-----	400.	-----

2

AFF- 94
JP-10 VERSUS RJ-4
1981 JUNE 30

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 605	-175	289.	289.	61.	61.	-7.	-7.	60.	60.
1 835	-25	121.	-----	-25.	-----	0.	-----	7.	-----
1 845	-15	-----	-361.	-----	148.	-----	100.	-----	-25.
1 1005	65	892.	-----	-74.	-----	-13.	-----	21.	-----
1 1015	75	-----	1253.	-----	148.	-----	-53.	-----	-25.
1 1105	125	2289.	-----	0.	-----	133.	-----	-46.	-----
1 1115	135	-----	6362.	-----	160.	-----	-93.	-----	63.
1 1205	185	2289.	-----	-49.	-----	-7.	-----	46.	-----
1 1215	195	-----	1.2E 04	-----	271.	-----	13.	-----	18.
1 1305	245	2651.	-----	-172.	-----	27.	-----	7.	-----
1 1315	255	-----	1.6E 04	-----	160.	-----	27.	-----	-14.
1 1405	305	2289.	-----	123.	-----	-7.	-----	-21.	-----
1 1415	315	-----	1.9E 04	-----	308.	-----	0.	-----	18.
1 1505	365	2073.	-----	-98.	-----	20.	-----	-102.	-----
1 1515	375	-----	2.1E 04	-----	504.	-----	-80.	-----	18.
1 1605	425	1470.	-----	74.	-----	53.	-----	-25.	-----
1 1615	435	-----	2.0E 04	-----	283.	-----	93.	-----	-4.
2 835	1415	482.	-----	-185.	-----	-13.	-----	11.	-----
2 845	1425	-----	1398.	-----	-160.	-----	-47.	-----	42.
2 1005	1505	337.	-----	-221.	-----	13.	-----	0.	-----
2 1015	1515	-----	795.	-----	-135.	-----	67.	-----	46.
2 1105	1565	169.	-----	37.	-----	-20.	-----	0.	-----
2 1115	1575	-----	1880.	-----	37.	-----	-47.	-----	21.
2 1205	1625	193.	-----	-37.	-----	33.	-----	-4.	-----
2 1215	1635	-----	2482.	-----	0.	-----	-20.	-----	25.
2 1305	1685	362.	-----	0.	-----	-13.	-----	32.	-----
2 1315	1695	-----	2338.	-----	74.	-----	7.	-----	-14.
2 1405	1745	723.	-----	12.	-----	13.	-----	-7.	-----
2 1415	1755	-----	2097.	-----	49.	-----	-7.	-----	4.
2 1505	1805	1133.	-----	221.	-----	-87.	-----	0.	-----
2 1515	1815	-----	1856.	-----	12.	-----	-20.	-----	11.

----- NO DATA TAKEN

NOTES

A POSSIBLE ROOM AIR LEAKAGE INTO SAMPLE MANIFOLD

AFF- 95
NOX-AIR IRRADIATION
1981, JULY 2

0807: START FILL. WET BULB: 6.0; DRY BULB: 36.7; R.H.= 20%
DEW POINT: 9.8C
1003: INJECTED 6.2 ML NO₂.
1005: INJECTED 20.0 ML NO
1007: INJECTED 0.46 ML PROPANE
1009: INJECTED 0.46 ML PROPENE
1100: BAG UNCOVERED (T=0)
1300: BAG COVERED, END OF RUN.

RESULTS:

CALC. AVG. OH = 30.8 * D LN(PROPANE/PROPENE)/DT = 0.083(+0.002) PPT
CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂) = 0.19 PPB/MIN
-D(NO₂)/DT = 0.51 PPB/MIN

T=0 AT 1100 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	39.1	1.9	DEG C
UV RAD	EPPLEY	3.65	0.60	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.440	PPM
NO ₂ -UNC	B-NOX-1	0.120	PPM
THC	BK6800-1	1.56	PPMC

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-2	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
3000	CA	CHROMOTROPHIC ACID HCHO ANALYSIS

AFF- 95
 NOX-AIR IRRADIATION
 1981, JULY 2

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	TH PP BK68
1 1045	-15	0.000	0.440	0.130	0.570	0.0145	0.0119	1.
1 1100	0	0.000	0.440	0.120	0.560	0.0145	0.0118	1.
1 1115	15	0.001	0.420	0.130	0.550	0.0143	0.0111	1.
1 1130	30	0.001	0.420	0.135	0.555	0.0145	0.0109	1.
1 1145	45	0.001	0.425	0.135	0.560	0.0131	0.0096	1.
1 1200	60	0.002	0.410	0.145	0.555	0.0140	0.0098	1.
1 1215	75	0.001	0.400	0.150	0.545	0.0146	0.0097	1.
1 1230	90	0.002	0.395	0.150	0.545	0.0140	0.0090	1.
1 1245	105	0.002	0.380	0.160	0.540	0.0145	0.0088	1.
1 1300	120	0.002	0.375	0.165	0.540	0.0147	0.0087	1.

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	PAN PPM ECI-3	HCHO PPM CA	ACETALD PPM 10'C-600	PROPALD PPM 10'C-600	ACETONE PPM 10'C-600
1 1045	-15	0.000	-----	0.0096	0.0016	-----
1 1050	-10	-----	0.010	-----	-----	-----
1 1100	0	0.000	-----	-----	-----	-----
1 1115	15	-----	-----	-----	-----	-----
1 1130	30	-----	-----	-----	-----	-----
1 1145	45	0.000	-----	-----	-----	-----
1 1200	60	-----	-----	-----	-----	-----
1 1215	75	-----	-----	-----	-----	-----
1 1230	90	-----	-----	-----	-----	-----
1 1245	105	0.000	-----	-----	-----	-----
1 1250	110	-----	0.000	-----	-----	-----
1 1300	120	-----	-----	0.0042	0.0004	0.0021

----- NO DATA TAKEN

468

12 NOV 1981

PAGE 2

INC	PROPANE PPM	PROPENE PPM	THC PPMC	LNC3/C3=	T DEG C	UV RAD MW/CM2	CO PPM
	DMS-1	DMS-1	BK6800-1		DORIC-1	EPPLEY	BK6800-1
570	0.0145	0.0119	1.50	0.1998	36.1	-----	1.30
560	0.0145	0.0118	1.56	0.2091	36.7	-----	1.30
550	0.0143	0.0111	1.55	0.2501	37.8	4.41	1.29
555	0.0145	0.0109	1.43	0.2816	37.9	4.27	1.29
560	0.0131	0.0096	1.55	0.3093	38.8	4.09	1.26
555	0.0140	0.0098	1.56	0.3558	40.4	3.09	1.34
545	0.0146	0.0097	1.54	0.4025	40.7	3.91	1.28
545	0.0140	0.0090	1.54	0.4394	40.4	3.37	1.33
540	0.0145	0.0088	1.42	0.4998	41.2	3.28	1.33
540	0.0147	0.0087	1.50	0.5260	41.3	2.77	1.34

ALD ACETONE
PPM

600 10'C-600

016 -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
--- -----
004 0.0021

2

AFF- 97
RJ-4: VARIABLE NOX
1981, JULY 8-9

DAY 1 (JULY 8)

0445: START FILL. WET: 6.0; DRY: 0.0; DRY BULB TEMP: 28.9C; RH=33%
0618: INJECT 624 MICROLITERS RJ-4 AT 250C FOR 30 MINUTES.
0653: DIVIDE BAG.
0710: INJECT 2.5 ML NO2 INTO SIDE A
0712: INJECT 9.0 ML NO INTO SIDE A
0720: INJECT 1.25 ML NO2 INTO SIDE B
0722: INJECT 4.5 ML NO INTO SIDE B
0900: UNCOVER BAG (T=0)
0905: WEATHER: SUNNY, HOT.
1620: END SAMPLING, DAY 1

DAY 2 (JULY 9)

0900: BAG UNCOVERED (T=0)
0905: WEATHER: HOT, SUNNY
1520: RUN ENDED

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	37(+/-2)	37(+/-2)
AVG.UV(MW/CM2)	2.8(+/-0.8)	2.7(+/-0.5)

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	35.0	5.5	DEG C SIDE 1
T	DORIC-1	35.2	5.0	DEG C SIDE 2
UV RAD	EPPLEY-2	2.74	0.67	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.380	PPM SIDE 1
NO	B-NOX-1	0.196	PPM SIDE 2
NO2-UNC	B-NOX-1	0.121	PPM SIDE 1
NO2-UNC	B-NOX-1	0.065	PPM SIDE 2
THC	BK6800-1	33.90	PPMC SIDE 1
THC	BK6800-1	34.70	PPMC SIDE 2

AFF - 97
RJ-4: VARIABLE NOX
1981, JULY 8-9

INSTRUMENTS USED			SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION	
2100	PN-1	RM-121 POROPAK-N GC; FID	
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID	
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID	
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030	
4350	CLIME1	CLIMET 208 OPTICAL PART. CTR;SN:76-148	
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B	
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;FN143	
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC. FID	
1790	D-1790	DASIBI 1790 OZONE MONITOR	
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2	
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D	
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479	
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD	
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG	
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS	

470

AFF - 97
 RJ-4: VARIARLE NOX
 1981, JULY 8-9

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX- PP B-NO
1 605	-175	0.000	0.000	0.010	0.010	0.001	0.001	0.
1 835	-25	0.001	-----	0.380	-----	0.121	-----	0.
1 845	-15	-----	0.002	-----	0.196	-----	0.065	---
1 1005	65	0.004	-----	0.302	-----	0.173	-----	0.
1 1015	75	-----	0.011	-----	0.130	-----	0.114	---
1 1105	125	0.010	-----	0.232	-----	0.227	-----	0.
1 1115	135	-----	0.029	-----	0.074	-----	0.158	---
1 1205	185	0.018	-----	0.150	-----	0.285	-----	0.
1 1215	195	-----	0.075	-----	0.033	-----	0.179	---
1 1305	245	0.043	-----	0.072	-----	0.345	-----	0.
1 1315	255	-----	0.169	-----	0.019	-----	0.150	---
1 1405	305	0.102	-----	0.032	-----	0.349	-----	0.
1 1415	315	-----	0.274	-----	0.016	-----	0.118	---
1 1505	365	0.186	-----	0.019	-----	0.322	-----	0.
1 1515	375	-----	0.364	-----	0.013	-----	0.062	---
1 1605	425	0.278	-----	0.013	-----	0.261	-----	0.
1 1615	435	-----	0.382	-----	0.011	-----	0.037	---
<hr/>								
2 835	1415	0.044	-----	0.011	-----	0.018	-----	0.
2 845	1425	-----	0.278	-----	0.011	-----	0.011	---
2 1005	1505	0.085	-----	0.012	-----	0.020	-----	0.
2 1015	1515	-----	0.260	-----	0.014	-----	0.021	---
2 1105	1565	0.111	-----	0.011	-----	0.021	-----	0.
2 1115	1575	-----	0.252	-----	0.012	-----	0.022	---
2 1205	1625	0.134	-----	0.011	-----	0.023	-----	0.
2 1215	1635	-----	0.246	-----	0.011	-----	0.022	---
2 1305	1685	0.155	-----	0.011	-----	0.024	-----	0.
2 1315	1695	-----	0.236	-----	0.012	-----	0.023	---
2 1405	1745	0.168	-----	0.012	-----	0.030	-----	0.
2 1415	1755	-----	0.227	-----	0.012	-----	0.028	---
2 1505	1805	0.175	-----	0.011	-----	0.028	-----	0.
2 1515	1815	-----	0.217	-----	0.012	-----	0.027	---

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0.001	0.001	0.011	0.011	0.46	0.46
0.121	-----	0.508	-----	33.90	-----
-----	0.065	-----	0.260	-----	34.70
0.173	-----	0.492	-----	33.70	-----
-----	0.114	-----	0.246	-----	34.30
0.227	-----	0.481	-----	33.10	-----
-----	0.158	-----	0.233	-----	33.90
0.285	-----	0.458	-----	32.80	-----
-----	0.179	-----	0.212	-----	33.30
0.345	-----	0.430	-----	32.10	-----
-----	0.160	-----	0.178	-----	32.50
0.349	-----	0.386	-----	31.30	-----
-----	0.118	-----	0.131	-----	31.20
0.322	-----	0.342	-----	29.70	-----
-----	0.062	-----	0.072	-----	30.20
0.261	-----	0.277	-----	29.20	-----
-----	0.037	-----	0.045	-----	29.40
0.018	-----	0.026	-----	25.90	-----
-----	0.011	-----	0.024	-----	28.80
0.020	-----	0.031	-----	25.80	-----
-----	0.021	-----	0.030	-----	28.80
0.021	-----	0.031	-----	25.20	-----
-----	0.022	-----	0.031	-----	28.20
0.023	-----	0.032	-----	25.00	-----
-----	0.022	-----	0.031	-----	28.10
0.024	-----	0.035	-----	24.50	-----
-----	0.023	-----	0.033	-----	27.80
0.030	-----	0.032	-----	24.30	-----
-----	0.028	-----	0.036	-----	27.60
0.028	-----	0.036	-----	23.30	-----
-----	0.027	-----	0.034	-----	27.30

2

AFF- 97
 RJ-4: VARIABLE NOX
 1981, JULY 8-9

CLOCK BY HR.	ELAPSED (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2	
		TIME	DEG C	TIME	DEG C	UV RAD MW/CM2	CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143	PART/CC CLIMET	PART/CC CLIMET	PART/3 CLIMET	PART/1 CLIMET	
1 605	-175	20.6	20.6	-----	-----	0.0	0.0	0.0	0.	0.	0.	0.	
1 835	-25	27.3	-----	-----	-----	12.0	-----	-----	0.	0.	-----	0.	
1 845	-15	-----	29.2	-----	-----	-----	11.0	-----	-----	-----	-----	0.	
1 1005	65	32.0	-----	-----	2.09	11.5	-----	-----	0.	0.	-----	0.	
1 1015	75	-----	35.5	-----	3.46	-----	11.3	-----	0.	0.	-----	0.	
1 1105	125	36.2	-----	-----	3.69	9.2	-----	-----	0.	0.	-----	0.	
1 1115	135	-----	37.0	-----	3.69	-----	9.0	-----	-----	-----	2	2	
1 1205	185	38.4	-----	-----	3.00	7.9	-----	-----	54.	54.	-----	221	
1 1215	195	-----	38.0	-----	3.64	-----	7.1	-----	308.	308.	-----	-----	
1 1305	245	40.0	-----	-----	3.46	6.1	-----	-----	405.	405.	-----	-----	
1 1315	255	-----	39.5	-----	3.37	-----	5.7	-----	415.	415.	-----	450	
1 1405	305	39.3	-----	-----	2.77	4.7	-----	-----	447.	447.	-----	464	
1 1415	315	-----	37.9	-----	2.59	-----	4.3	-----	465.	465.	-----	465.	
1 1505	365	38.2	-----	-----	2.27	3.5	-----	-----	466.	466.	-----	466.	
1 1515	375	-----	37.5	-----	2.18	-----	3.2	-----	470.	470.	-----	470.	
1 1605	425	36.5	-----	-----	1.46	2.3	-----	-----	471.	471.	-----	471.	
1 1615	435	-----	35.0	-----	1.32	-----	2.2	-----	472.	472.	-----	472.	
2 835	1415	28.6	-----	-----	-----	0.0	-----	-----	121.	121.	-----	-----	
2 845	1425	-----	29.5	-----	-----	-----	0.0	-----	-----	170.	170.	-----	
2 1005	1505	32.3	-----	-----	2.41	5.6	-----	-----	81.	81.	-----	-----	
2 1015	1515	-----	33.7	-----	2.91	-----	0.4	-----	127.	127.	-----	127.	
2 1105	1565	35.9	-----	-----	3.37	4.4	-----	-----	201.	201.	-----	189.	
2 1115	1575	-----	36.2	-----	3.28	-----	0.3	-----	189.	189.	-----	189.	
2 1205	1625	37.3	-----	-----	2.77	3.1	-----	-----	335.	335.	-----	335.	
2 1215	1635	-----	38.8	-----	3.28	-----	0.1	-----	294.	294.	-----	294.	
2 1305	1685	39.3	-----	-----	2.82	2.1	-----	-----	338.	338.	-----	338.	
2 1315	1695	-----	38.6	-----	2.77	-----	0.0	-----	400.	400.	-----	400.	
2 1405	1745	40.0	-----	-----	2.45	1.4	-----	-----	299.	299.	-----	299.	
2 1415	1755	-----	39.0	-----	2.32	-----	0.0	-----	386.	386.	-----	386.	
2 1505	1805	38.4	-----	-----	2.00	1.1	-----	-----	233.	233.	-----	233.	
2 1515	1815	-----	38.0	-----	1.91	-----	0.0	-----	233.	233.	-----	233.	

----- NO DATA TAKEN

472

12 NOV 1981

PAGE 4

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	0.	-----	0.	-----	0.	-----
11.0	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
11.3	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
9.0	-----	2.	-----	0.	-----	0.
-----	54.	-----	0.	-----	0.	-----
7.1	-----	221.	-----	12.	-----	0.
-----	308.	-----	49.	-----	0.	-----
5.7	-----	405.	-----	169.	-----	5.
-----	415.	-----	194.	-----	9.	-----
4.3	-----	450.	-----	294.	-----	51.
-----	447.	-----	288.	-----	47.	-----
3.2	-----	464.	-----	336.	-----	86.
-----	465.	-----	329.	-----	80.	-----
3.2	-----	465.	-----	331.	-----	81.
-----	121.	-----	110.	-----	2.	-----
0.0	-----	170.	-----	22.	-----	0.
-----	81.	-----	79.	-----	2.	-----
0.4	-----	127.	-----	95.	-----	1.
-----	201.	-----	62.	-----	2.	-----
0.3	-----	189.	-----	94.	-----	3.
-----	335.	-----	104.	-----	5.	-----
0.1	-----	294.	-----	109.	-----	5.
-----	384.	-----	167.	-----	10.	-----
0.0	-----	338.	-----	114.	-----	7.
-----	400.	-----	192.	-----	14.	-----
0.0	-----	299.	-----	108.	-----	8.
-----	386.	-----	180.	-----	12.	-----
0.0	-----	233.	-----	136.	-----	6.

2

AFF- 97

RJ-4: VARIABLE NOX
1981, JULY 8-9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		BSCAT 10-4 M-1 MRI-388	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.N PART/CC TSI-023	AER. UM2 TSI-1
1 605	-175	0.2	0.2	-3.	-3.	353.	353.	-4
1 735	-85	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.2	-----	1.	-----	1.7E 04	-----	4
1 845	-15	-----	0.2	-----	2.	-----	1.7E 04	-----
1 1005	65	1.2	-----	11.	-----	4.7E 04	-----	64
1 1015	75	-----	1.8	-----	11.	-----	4.5E 04	-----
1 1105	125	3.6	-----	12.	-----	4.4E 04	-----	80
1 1115	135	-----	5.6	-----	7.	-----	1.0E 04	-----
1 1205	185	8.3	-----	16.	-----	4.2E 04	-----	94
1 1215	195	-----	16.0	-----	15.	-----	4.1E 04	-----
1 1305	245	19.0	-----	18.	-----	4.4E 04	-----	104
1 1315	255	-----	29.0	-----	22.	-----	4.9E 04	-----
1 1405	305	29.0	-----	22.	-----	3.8E 04	-----	114
1 1415	315	-----	40.0	-----	26.	-----	4.0E 04	-----
1 1505	365	40.0	-----	25.	-----	3.5E 04	-----	116
1 1515	375	-----	53.0	-----	24.	-----	3.3E 04	-----
1 1605	425	50.0	-----	26.	-----	2.9E 04	-----	111
1 1615	435	-----	50.0	-----	30.	-----	2.5E 04	-----
2 720	1340	-----	-----	-----	-----	-----	-----	-----
2 830	1410	-----	-----	-----	-----	-----	-----	-----
2 835	1415	2.5	-----	2.	-----	1319.	-----	5
2 845	1425	-----	3.0	-----	6.	-----	285.	-----
2 1005	1505	5.2	-----	12.	-----	2.7E 04	-----	58
2 1015	1515	-----	3.4	-----	3.	-----	4636.	-----
2 1105	1565	12.0	-----	13.	-----	2.4E 04	-----	64
2 1115	1575	-----	5.2	-----	5.	-----	4701.	-----
2 1205	1625	17.0	-----	13.	-----	2.8E 04	-----	63
2 1215	1635	-----	7.2	-----	2.	-----	5346.	-----
2 1305	1685	19.0	-----	11.	-----	1.8E 04	-----	54
2 1315	1695	-----	7.0	-----	3.	-----	3761.	-----
2 1405	1745	20.0	-----	10.	-----	1.3E 04	-----	43
2 1415	1755	-----	5.6	-----	-3.	-----	3266.	-----
2 1505	1805	16.0	-----	13.	-----	1.0E 04	-----	38
2 1515	1815	-----	4.5	-----	6.	-----	2438.	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/PC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 RJ-4(A) PPMC VAR 3700	SIDE 2 RJ-4(A) PPMC VAR 3700
353.	353.	-41.	-41.	-----	-----
-----	-----	-----	-----	1.376	-----
1.7E 04	-----	44.	-----	-----	-----
-----	1.7E 04	-----	53.	-----	1.569
4.7E 04	-----	643.	-----	1.576	-----
-----	4.5E 04	-----	637.	-----	-----
4.4E 04	-----	802.	-----	-----	-----
-----	4.0E 04	-----	724.	-----	1.516
4.2E 04	-----	942.	-----	1.514	-----
-----	4.1E 04	-----	932.	-----	-----
4.4E 04	-----	1048.	-----	-----	-----
-----	4.9E 04	-----	1085.	-----	-----
3.8E 04	-----	1147.	-----	-----	-----
-----	4.0E 04	-----	1131.	-----	1.450
3.5E 04	-----	1168.	-----	1.409	-----
-----	3.3E 04	-----	1072.	-----	-----
2.9E 04	-----	1113.	-----	-----	-----
-----	2.5E 04	-----	1002.	-----	1.373
-----	-----	-----	-----	-----	1.321
-----	-----	-----	-----	1.273	-----
1319.	-----	53.	-----	-----	-----
-----	285.	-----	97.	-----	-----
2.7E 04	-----	588.	-----	-----	-----
-----	4636.	-----	113.	-----	1.325
2.4E 04	-----	645.	-----	1.229	-----
-----	4701.	-----	148.	-----	-----
2.8E 04	-----	630.	-----	-----	-----
-----	5346.	-----	133.	-----	1.268
1.8E 04	-----	541.	-----	-----	-----
-----	3761.	-----	127.	-----	-----
1.3E 04	-----	438.	-----	1.140	-----
-----	3266.	-----	70.	-----	-----
1.0E 04	-----	383.	-----	-----	-----
-----	2438.	-----	113.	-----	1.213

2

AFF- 97
RJ-4: VARIABLE NOX
1981, JULY 8-9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1
		RJ-4(B) PPMC	VAR 3700	RJ-4(B) PPMC	VAR 3700	RJ-4(C) PPMC	VAR 3700	RJ-4(C) PPMC	VAR 3700	RJ-4(D) PPMC	VAR 3700	RJ-4(D) PPMC	VAR 3700	RJ- P VAR
1 735	-85	1.012	-----	1.427	-----	1.525	-----	3						
1 845	-15	-----	1.186	-----	1.746	-----	1.836	-----						
1 1005	65	1.180	-----	1.735	-----	1.861	-----	4						
1 1115	135	-----	1.130	-----	1.667	-----	1.782	-----						
1 1205	185	1.130	-----	1.657	-----	1.767	-----	4						
1 1415	315	-----	1.094	-----	1.601	-----	1.699	-----						
1 1505	365	1.068	-----	1.560	-----	1.634	-----	3						
1 1615	435	-----	1.051	-----	1.546	-----	1.621	-----						
2 720	1340	-----	1.013	-----	1.496	-----	1.563	-----						
2 830	1410	0.996	-----	1.473	-----	1.493	-----	3						
2 1015	1515	-----	1.022	-----	1.513	-----	1.565	-----						
2 1105	1565	0.963	-----	1.422	-----	1.422	-----	3						
2 1215	1635	-----	0.979	-----	1.426	-----	1.481	-----						
2 1405	1745	0.882	-----	1.316	-----	1.328	-----	3						
2 1515	1815	-----	0.940	-----	1.361	-----	1.406	-----						

----- NO DATA TAKEN

h/h

12 NOV 1981

PAGE 6

SIDE 1 RJ-4(D) PPMC VAR 3700	SIDE 2 RJ-4(D) PPMC VAR 3700	SIDE 1 RJ-4(E) PPMC VAR 3700	SIDE 2 RJ-4(E) PPMC VAR 3700	SIDE 1 RJ-4(F) PPMC VAR 3700	SIDE 2 RJ-4(F) PPMC VAR 3700
1.525	-----	3.774	-----	1.364	-----
-----	1.836	-----	4.487	-----	1.579
1.861	-----	4.628	-----	1.595	-----
-----	1.782	-----	4.419	-----	1.548
1.767	-----	4.345	-----	1.507	-----
-----	1.699	-----	4.153	-----	1.527
1.634	-----	3.948	-----	1.410	-----
-----	1.621	-----	3.911	-----	1.415
-----	1.563	-----	3.767	-----	1.404
1.493	-----	3.469	-----	1.136	-----
-----	1.565	-----	3.699	-----	1.258
1.422	-----	3.262	-----	1.093	-----
-----	1.481	-----	3.510	-----	1.223
1.328	-----	3.041	-----	0.901	-----
-----	1.406	-----	3.303	-----	1.140

2

AFF- 97

RJ-4: VARIABLE NOX
1981, JULY 8-9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SI H P	
		RJ-4(G) PPMC	VAR 3700	RJ-4(G) PPMC	VAR 3700	CO PPM	BK6800-1	CO PPM	BK6800-1	PAN PPM	ECD-3	PAN PPM	ECD-3		
1 605	-175	-----	-----	-----	-----	0.75	-----	0.75	-----	0.000	-----	0.000	-----	---	
1 735	-85	1.995	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---	
1 805	-55	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	
1 835	-25	-----	-----	-----	-----	0.81	-----	-----	-----	0.000	-----	-----	-----	---	
1 845	-15	-----	-----	2.500	-----	-----	-----	0.93	-----	-----	0.000	-----	-----	---	
1 1005	65	2.382	-----	-----	-----	0.95	-----	-----	-----	0.001	-----	-----	-----	---	
1 1015	75	-----	-----	-----	-----	-----	-----	0.92	-----	-----	0.001	-----	-----	---	
1 1105	125	-----	-----	-----	-----	0.92	-----	-----	-----	0.001	-----	-----	-----	---	
1 1115	135	-----	-----	2.257	-----	-----	-----	0.94	-----	-----	0.001	-----	-----	---	
1 1200	180	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	
1 1205	185	1.997	-----	-----	-----	0.95	-----	-----	-----	0.001	-----	-----	-----	---	
1 1215	195	-----	-----	-----	-----	-----	-----	0.95	-----	-----	0.002	-----	-----	---	
1 1305	245	-----	-----	-----	-----	0.94	-----	-----	-----	0.002	-----	-----	-----	---	
1 1315	255	-----	-----	-----	-----	-----	-----	1.00	-----	-----	0.004	-----	-----	---	
1 1405	305	-----	-----	-----	-----	1.00	-----	-----	-----	0.004	-----	-----	-----	---	
1 1415	315	-----	-----	2.104	-----	-----	-----	1.03	-----	-----	0.007	-----	-----	---	
1 1505	365	1.916	-----	-----	-----	1.00	-----	-----	-----	0.006	-----	-----	-----	---	
1 1515	375	-----	-----	-----	-----	-----	-----	1.03	-----	-----	0.009	-----	-----	---	
1 1605	425	-----	-----	-----	-----	1.06	-----	-----	-----	0.009	-----	-----	-----	---	
1 1610	430	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0	
1 1615	435	-----	-----	1.566	-----	-----	-----	1.03	-----	-----	0.011	-----	-----	---	
4/75	2 720	1340	-----	2.037	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---
	2 810	1390	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0
	2 830	1410	1.554	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---
	2 835	1415	-----	-----	-----	1.06	-----	-----	-----	0.005	-----	-----	-----	---	---
	2 845	1425	-----	-----	-----	-----	-----	1.07	-----	-----	0.001	-----	-----	-----	---
	2 1005	1505	-----	-----	-----	1.09	-----	-----	-----	0.007	-----	-----	-----	---	---
	2 1015	1515	-----	1.743	-----	-----	-----	1.08	-----	-----	0.006	-----	-----	-----	---
	2 1105	1565	1.362	-----	-----	1.12	-----	-----	-----	0.007	-----	-----	-----	---	---
	2 1115	1575	-----	-----	-----	-----	-----	1.13	-----	-----	0.006	-----	-----	-----	---
	2 1200	1620	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0
	2 1205	1625	-----	-----	-----	1.17	-----	-----	-----	0.007	-----	-----	-----	---	---
	2 1215	1635	-----	1.591	-----	-----	-----	1.18	-----	-----	0.006	-----	-----	-----	---
	2 1305	1685	-----	-----	-----	1.20	-----	-----	-----	0.006	-----	-----	-----	---	---
	2 1315	1695	-----	-----	-----	-----	-----	1.22	-----	-----	0.005	-----	-----	-----	---
	2 1405	1745	0.934	-----	-----	1.24	-----	-----	-----	0.006	-----	-----	-----	---	---
	2 1415	1755	-----	-----	-----	-----	-----	1.25	-----	-----	0.005	-----	-----	-----	---
	2 1505	1805	-----	-----	-----	1.28	-----	-----	-----	0.007	-----	-----	-----	-----	0
	2 1510	1810	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0
	2 1515	1815	-----	1.463	-----	-----	-----	1.30	-----	-----	0.005	-----	-----	-----	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
0.000	0.000	-----	-----	501.	501.
-----	-----	-----	-----	-----	-----
-----	-----	0.006	0.004	-----	-----
0.000	-----	-----	-----	1.6E 04	-----
-----	0.000	-----	-----	-----	1.6E 04
0.001	-----	-----	-----	2171.	-----
-----	0.001	-----	-----	-----	2338.
0.001	-----	-----	-----	668.	-----
-----	0.001	-----	-----	-----	-668.
-----	-----	0.010	0.008	-----	-----
0.001	-----	-----	-----	0.	-----
-----	0.002	-----	-----	-----	-167.
0.002	-----	-----	-----	-1503.	-----
-----	0.004	-----	-----	-----	2672.
0.004	-----	-----	-----	334.	-----
-----	0.007	-----	-----	-----	-167.
0.006	-----	-----	-----	1169.	-----
-----	0.009	-----	-----	-----	1336.
0.009	-----	-----	-----	501.	-----
-----	0.029	-----	0.019	-----	-----
-----	0.011	-----	-----	-----	-3173.
-----	-----	-----	-----	-----	-----
-----	-----	0.044	0.031	-----	-----
0.005	-----	-----	-----	167.	-----
-----	0.001	-----	-----	-----	-1169.
0.007	-----	-----	-----	501.	-----
-----	0.006	-----	-----	-----	668.
0.007	-----	-----	-----	167.	-----
-----	0.006	-----	-----	-----	167.
0.007	-----	0.044	0.031	-----	-----
-----	0.006	-----	-----	7515.	-----
0.006	-----	-----	-----	-----	1002.
-----	0.005	-----	-----	1503.	-----
0.006	-----	-----	-----	334.	-----
-----	0.005	-----	-----	334.	-----
0.007	-----	-----	-----	501.	-----
-----	0.059	-----	0.029	-----	-----
-----	0.005	-----	-----	1002.	-----
-----	-----	-----	-----	-----	167.

2

AFF- 97
 RJ-4: VARIABLE NOX
 1981, JULY 8-9

CLOCK DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		PART.042 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART. TSI-023
1 605	-175	-435.	-435.	355.	355.	24.	24.	-12
1 835	-25	522.	-----	488.	-----	120.	-----	6
1 845	-15	-----	87.	-----	178.	-----	-24.	---
1 1005	65	2.1E 04	-----	2.3E 04	-----	988.	-----	98
1 1015	75	-----	1.5E 04	-----	2.6E 04	-----	1036.	---
1 1105	125	7047.	-----	3.4E 04	-----	2530.	-----	23
1 1115	135	-----	4089.	-----	3.5E 04	-----	2289.	---
1 1205	185	1653.	-----	3.5E 04	-----	5109.	-----	86
1 1215	195	-----	1566.	-----	3.4E 04	-----	5374.	---
1 1305	245	2175.	-----	3.6E 04	-----	6724.	-----	74
1 1315	255	-----	3741.	-----	3.5E 04	-----	6868.	---
1 1405	305	522.	-----	2.5E 04	-----	1.2E 04	-----	121
1 1415	315	-----	1218.	-----	3.0E 04	-----	9592.	---
1 1505	365	957.	-----	1.9E 04	-----	1.3E 04	-----	209
1 1515	375	-----	2175.	-----	1.7E 04	-----	1.2E 04	---
1 1605	425	348.	-----	1.4E 04	-----	1.4E 04	-----	258
1 1615	435	-----	1653.	-----	1.5E 04	-----	1.1E 04	---
2 835	1415	783.	-----	-488.	-----	819.	-----	25
2 845	1425	-----	435.	-----	444.	-----	458.	---
2 1005	1505	2958.	-----	2.1E 04	-----	2771.	-----	49
2 1015	1515	-----	435.	-----	2753.	-----	747.	---
2 1105	1565	0.	-----	1.9E 04	-----	4699.	-----	-25
2 1115	1575	-----	-87.	-----	3419.	-----	1205.	---
2 1205	1625	435.	-----	1.5E 04	-----	5760.	-----	0
2 1215	1635	-----	348.	-----	2442.	-----	1518.	---
2 1305	1685	-783.	-----	1.1E 04	-----	5519.	-----	160
2 1315	1695	-----	-261.	-----	2220.	-----	1518.	---
2 1405	1745	435.	-----	7459.	-----	5278.	-----	-86
2 1415	1755	-----	0.	-----	1376.	-----	1350.	---
2 1505	1805	348.	-----	4440.	-----	4362.	-----	12
2 1515	1815	-----	261.	-----	977.	-----	1012.	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
275	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
C	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	24.	24.	-12.	-12.	-80.	-80.
	-120.	-----	61.	-----	0.	-----
	-----	-24.	-----	0.	-----	40.
	988.	-----	98.	-----	73.	-----
04	-----	1036.	-----	25.	-----	33.
	2530.	-----	234.	-----	-47.	-----
04	-----	2289.	-----	-62.	-----	-33.
	5109.	-----	86.	-----	0.	-----
04	-----	5374.	-----	49.	-----	27.
	6724.	-----	74.	-----	0.	-----
04	-----	6868.	-----	86.	-----	0.
	1.2E 04	-----	123.	-----	13.	-----
04	-----	9592.	-----	0.	-----	20.
	1.3E 04	-----	209.	-----	80.	-----
04	-----	1.2E 04	-----	111.	-----	13.
	1.4E 04	-----	258.	-----	13.	-----
04	-----	1.1E 04	-----	0.	-----	0.
	819.	-----	25.	-----	13.	-----
	-----	458.	-----	49.	-----	53.
	2771.	-----	49.	-----	33.	-----
	-----	747.	-----	0.	-----	33.
	4699.	-----	-25.	-----	80.	-----
	-----	1203.	-----	-37.	-----	27.
	5760.	-----	0.	-----	67.	-----
	-----	1518.	-----	49.	-----	-13.
	5519.	-----	160.	-----	0.	-----
	-----	1518.	-----	-74.	-----	20.
	5278.	-----	-86.	-----	33.	-----
	-----	1350.	-----	37.	-----	33.
	4362.	-----	12.	-----	0.	-----
	-----	1012.	-----	0.	-----	0.

2

AFF- 97
RJ-4: VARIABLE NOX
1981, JULY 8-9

		SIDE 1	SIDE 2
CLOCK	ELAPSED	PART.750	PART.750
TIME	TIME	PART/CC	PART/CC
DY	HR.	(MIN)	TSI-023
1	605	-175	0.
1	835	-25	0.
1	845	-15	-----
1	1005	65	0.
1	1015	75	-----
1	1105	125	7.
1	1115	135	-----
1	1205	185	4.
1	1215	195	-----
1	1305	245	4.
1	1315	255	-----
1	1405	305	0.
1	1415	315	-----
1	1505	365	0.
1	1515	375	-----
1	1605	425	18.
1	1615	435	-----
2	835	1415	0.
2	845	1425	-----
2	1005	1505	11.
2	1015	1515	-----
2	1105	1565	0.
2	1115	1575	-----
2	1205	1625	0.
2	1215	1635	-----
2	1305	1685	4.
2	1315	1695	-----
2	1405	1745	4.
2	1415	1755	-----
2	1505	1805	32.
2	1515	1815	-----

----- NO DATA TAKEN

NOTES

A INJECTION FROM SIDE A STILL COMING OUT UNDER THIS. VALUE IS TOO HIGH.
CARRIER GAS FLOW CONTROLLER MALFUNCTIONING ON THE VARIAN FOR THE
POINTS 11405 AND 11515 SO RETENTION TIMES HAVE CHANGED. POSSIBLE
EFFECT ON AREAS.

AFF- 98
RJ-4 VS N-BUTANE
1981, JULY 10

0445: START FILL. WET: 6.0; DRY: 0.0; WET BULB TEMP: 14.3 C;
DRY BULB TEMP: 21.0 C; RH: 48%
0630: INJECT 5.0 ML NO₂
0632: INJECT 18.0 ML NO
0635: DIVIDE BAG
0644: INJECT 312 MICROLITERS RJ-4 AT 250 C INTO SIDE A
0704: INJECT 125 ML N-BUTANE INTO SIDE B
0900: UNCOVER BAG
0905: WEATHER: HOT,SUNNY
1620: END RUN

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	34.7	6.2	DEG C
T	DORIC-1	34.7	5.6	DEG C
UV RAD	EPPLEY-2	2.88	0.71	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.366	PPM
NO	B-NOX-1	0.369	PPM
NO ₂ -UNC	B-NOX-1	0.121	PPM
NO ₂ -UNC	B-NOX-1	0.128	PPM
N-C4	VA1400-7	5.5365	PPM
THC	BK6800-1	34.30	PPMC
THC	BK6800-1	41.70	PPMC

INSTRUMENTS USED

478

ID	LABEL	DESCRIPTION
1790	D-1790	VASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART, CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1400	VA1400-7	RM-121; C20-M/DC-703 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 98
RJ-4 VS N-BUTANE
1981, JULY 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX-1 PPM
1 605	-175	0.000	0.000	0.002	0.002	0.001	0.001	0.001
1 835	-25	0.000	-----	0.366	-----	0.121	-----	0.000
1 845	-15	-----	0.000	-----	0.369	-----	0.128	-----
1 915	15	-----	-----	-----	-----	-----	-----	-----
1 1005	65	0.004	-----	0.292	-----	0.168	-----	0.000
1 1015	75	-----	0.008	-----	0.220	-----	0.247	-----
1 1105	125	0.008	-----	0.221	-----	0.218	-----	0.000
1 1115	135	-----	0.024	-----	0.114	-----	0.347	-----
1 1205	185	0.019	-----	0.139	-----	0.284	-----	0.000
1 1215	195	-----	0.080	-----	0.040	-----	0.422	-----
1 1305	245	0.045	-----	0.064	-----	0.341	-----	0.000
1 1315	255	-----	0.193	-----	0.014	-----	0.437	-----
1 1405	305	0.108	-----	0.022	-----	0.347	-----	0.000
1 1415	315	-----	0.321	-----	0.010	-----	0.417	-----
1 1505	365	0.204	-----	0.011	-----	0.312	-----	0.000
1 1515	375	-----	0.450	-----	0.009	-----	0.390	-----
1 1605	425	0.303	-----	0.007	-----	0.242	-----	0.000
1 1615	435	-----	0.530	-----	0.008	-----	0.359	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		THC PPMC	THC PPMC	T DEG C	T DEG C	UV RAD MW/CM2	EPPLEY-2	CONDENS 10E3/CC
1 605	-175	0.91	0.91	21.6	21.6	-----	-----	0.0
1 835	-25	34.30	-----	28.7	-----	-----	-----	23.8
1 845	-15	-----	41.70	-----	30.1	-----	-----	0.
1 1005	65	33.80	-----	32.6	-----	2.02	18.0	-----
1 1015	75	-----	41.00	-----	34.5	3.09	-----	0.
1 1105	125	33.50	-----	35.0	-----	3.54	13.5	-----
1 1115	135	-----	41.60	-----	37.2	3.82	-----	0.
1 1205	185	33.20	-----	38.7	-----	2.96	11.2	-----
1 1215	195	-----	41.40	-----	38.7	3.46	-----	0.
1 1305	245	32.80	-----	40.1	-----	3.55	9.6	-----
1 1315	255	-----	41.50	-----	38.0	3.46	-----	0.
1 1405	305	31.80	-----	39.4	-----	3.09	7.4	-----
1 1415	315	-----	40.50	-----	38.3	2.91	-----	0.
1 1505	365	30.90	-----	39.0	-----	2.54	5.6	-----
1 1515	375	-----	40.90	-----	38.1	2.41	-----	0.
1 1605	425	29.50	-----	37.3	-----	1.73	4.0	-----
1 1615	435	-----	40.50	-----	36.2	1.64	-----	0.

----- NO DATA TAKEN

12 NOV 1981

PAGE 2

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 2 N-C4 PPM VA1400-7	SIDE 2 N-C4 PPM DMS-1
0.001	0.001	0.007	0.007	-----	0.0011
0.121	-----	0.498	-----	-----	-----
-----	0.128	-----	0.500	5.537	-----
-----	-----	-----	-----	5.464	-----
0.168	-----	0.478	-----	-----	-----
-----	0.247	-----	0.492	5.443	-----
0.218	-----	0.461	-----	-----	-----
-----	0.347	-----	0.488	5.402	-----
0.284	-----	0.445	-----	-----	-----
-----	0.422	-----	0.475	5.371	-----
0.341	-----	0.419	-----	-----	-----
-----	0.437	-----	0.453	5.298	-----
0.347	-----	0.377	-----	-----	-----
-----	0.417	-----	0.430	5.225	-----
0.312	-----	0.325	-----	-----	-----
-----	0.390	-----	0.403	5.163	6.120
0.242	-----	0.252	-----	-----	-----
-----	0.359	-----	0.371	5.122	-----

UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
-----	0.0	0.0	0.	0.	0.	0.
-----	23.8	-----	0.	-----	0.	-----
-----	-----	0.0	-----	0.	-----	0.
2.02	18.0	-----	0.	-----	0.	-----
3.09	-----	0.0	-----	0.	-----	0.
3.64	13.5	-----	0.	-----	0.	-----
3.82	-----	0.0	-----	0.	-----	0.
2.96	11.2	-----	9.	-----	0.	-----
3.46	-----	0.0	-----	0.	-----	0.
3.55	9.6	-----	236.	-----	14.	-----
3.46	-----	0.0	-----	1.	-----	0.
3.09	7.4	-----	401.	-----	158.	-----
2.91	-----	0.0	-----	14.	-----	0.
2.54	5.6	-----	446.	-----	279.	-----
2.41	-----	0.0	-----	18.	-----	0.
1.73	4.0	-----	465.	-----	335.	-----
1.64	-----	0.0	-----	16.	-----	0.

J

AFF- 98
 RJ-4 VS N-BUTANE
 1981, JULY 10

CLOCK TIME DY HR.	ELAPSED TIME (.1IN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		#PART>1 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	AER PART TSI-
1 605	-175	0.	0.	0.2	0.2	2.	2.	181
1 735	-85	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.	-----	0.2	-----	1.	-----	6.2
1 845	-15	-----	0.	-----	0.2	-----	3.	---
1 1005	65	0.	-----	1.0	-----	11.	-----	7.6
1 1015	75	-----	0.	-----	0.5	-----	3.	---
1 1105	125	0.	-----	2.7	-----	15.	-----	6.4
1 1115	135	-----	0.	-----	0.6	-----	1.	---
1 1205	185	0.	-----	6.9	-----	20.	-----	5.2
1 1215	195	-----	0.	-----	0.0	-----	1.	---
1 1305	245	0.	-----	16.0	-----	21.	-----	5.0
1 1315	255	-----	0.	-----	0.0	-----	-0.	---
1 1405	305	4.	-----	28.0	-----	29.	-----	4.4
1 1415	315	-----	0.	-----	0.0	-----	2.	---
1 1505	365	39.	-----	44.0	-----	27.	-----	3.9
1 1515	375	-----	0.	-----	0.0	-----	9.	---
1 1605	425	84.	-----	53.0	-----	33.	-----	3.2
1 1615	435	-----	0.	-----	0.1	-----	0.	---

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 1					
		RJ-4(B) PPMC VAR 3700	RJ-4(C) PPMC VAR 3700	RJ-4(D) PPMC VAR 3700	RJ-4(E) PPMC VAR 3700	RJ-4(F) PPMC VAR 3700	RJ-4(G) PPMC VAR 3700	RJ-4(H) PP VAR 3700
1 605	-175	-----	-----	-----	-----	-----	-----	1.
1 735	-85	1.104	1.576	1.689	4.187	1.448	2.344	---
1 835	-25	1.109	1.649	1.746	4.350	1.472	2.463	1.
1 845	-15	-----	-----	-----	-----	-----	-----	---
1 1005	65	1.103	1.584	1.701	4.219	1.438	2.253	1.
1 1015	75	-----	-----	-----	-----	-----	-----	---
1 1105	125	1.107	1.620	1.736	4.321	1.465	2.138	1.
1 1115	135	-----	-----	-----	-----	-----	-----	---
1 1205	185	1.094	1.593	1.700	4.206	1.423	2.263	1.
1 1215	195	-----	-----	-----	-----	-----	-----	---
1 1305	245	1.086	1.599	1.717	4.203	1.425	2.283	1.
1 1315	255	-----	-----	-----	-----	-----	-----	---
1 1405	305	1.022	1.487	1.581	3.859	1.313	1.963	1.
1 1415	315	-----	-----	-----	-----	-----	-----	---
1 1505	365	1.041	1.526	1.611	3.923	1.358	2.008	1.
1 1515	375	-----	-----	-----	-----	-----	-----	---
1 1605	425	0.960	1.388	1.456	3.514	1.234	1.650	1.
1 1615	435	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
AER.V	AER.V	AER.N	AER.N	AER.S	AER.S	RJ-4(A)
UM3/CC	UM3/CC	PART/CC	PART/CC	UM2/CC	UM2/CC	PPMC
TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	VAR 3700

2.	2.	1812.	1812.	35.	35.	-----
-----	-----	-----	-----	-----	-----	1.481
1.	-----	6.2E 04	-----	156.	-----	1.498
-----	3.	-----	383.	-----	21.	-----
11.	-----	7.6E 04	-----	744.	-----	1.460
-----	3.	-----	1021.	-----	32.	-----
15.	-----	6.4E 04	-----	966.	-----	1.480
-----	1.	-----	1398.	-----	11.	-----
20.	-----	5.2E 04	-----	1124.	-----	1.454
-----	1.	-----	259.	-----	13.	-----
21.	-----	5.0E 04	-----	1205.	-----	1.448
-----	-0.	-----	-653.	-----	-11.	-----
29.	-----	4.4E 04	-----	1309.	-----	1.354
-----	2.	-----	-331.	-----	20.	-----
27.	-----	3.9E 04	-----	1290.	-----	1.372
-----	0.	-----	220.	-----	13.	-----
33.	-----	3.2E 04	-----	1260.	-----	1.262
-----	0.	-----	193.	-----	11.	-----

SIDE 1	SIDE 1	SIDE 1	SIDE 2	SIDE 1	SIDE 2
RJ-4(F)	RJ-4(G)	CO	CO	PAN	PAN
PPMC	PPMC	PPM	PPM	PPM	PPM
VAR 3700	VAR 3700	BK6800-1	BK6800-1	ECD-3	ECD-3

-----	-----	1.60	1.60	0.000	0.000
1.448	2.344	-----	-----	-----	-----
1.472	2.463	1.54	-----	0.000	-----
-----	-----	-----	1.65	-----	0.000
1.438	2.253	1.63	-----	0.000	-----
-----	-----	-----	1.60	-----	0.008
1.465	2.138	1.66	-----	0.001	-----
-----	-----	-----	1.64	-----	0.017
1.423	2.263	1.64	-----	0.002	-----
-----	-----	-----	1.61	-----	0.027
1.425	2.283	1.60	-----	0.002	-----
-----	-----	-----	1.66	-----	0.036
1.313	1.963	1.67	-----	0.004	-----
-----	-----	-----	1.69	-----	0.053
1.358	2.008	1.73	-----	0.009	-----
-----	-----	-----	1.73	-----	0.073
1.234	1.650	1.74	-----	0.013	-----
-----	-----	-----	1.70	-----	0.094

2

AFF- 98
 RJ-4 VS N-BUTANE
 1981, JULY 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 1	SIDE 2	SIDE 1	SIDE 1
		HCHO PPM CA	HCHO PPM CA	ACETALD PPM 10'C-600	PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART TSI-
1 605	-175	-----	-----	0.0028	1336.	1336.	174.	17
1 735	-85	-----	-----	0.0223	-----	-----	-----	---
1 810	-50	0.006	0.006	-----	-----	-----	-----	---
1 835	-25	-----	-----	-----	5.5E 04	-----	6003.	---
1 845	-15	-----	-----	-----	-----	1169.	-----	-69
1 1005	65	-----	-----	-----	1.4E 04	-----	3.8E 04	---
1 1015	75	-----	-----	-----	-----	501.	-----	43
1 1105	125	-----	-----	-----	2004.	-----	2.0E 04	---
1 1115	135	-----	-----	-----	-----	1503.	-----	---
1 1200	180	0.019	0.015	-----	-----	-----	-----	---
1 1205	185	-----	-----	-----	-4342.	-----	5481.	---
1 1215	195	-----	-----	-----	-----	0.	-----	---
1 1305	245	-----	-----	-----	-835.	-----	-435.	---
1 1315	255	-----	-----	-----	-----	0.	-----	-43
1 1405	305	-----	-----	-----	-1002.	-----	-174.	---
1 1415	315	-----	-----	-----	-----	-1002.	-----	60
1 1505	365	-----	-----	-----	167.	-----	0.	---
1 1515	375	-----	-----	-----	-----	0.	-----	-26
1 1605	425	-----	-----	0.0154	0.	-----	0.	---
1 1610	430	0.040	0.036	-----	-----	-----	-----	---
1 1615	435	-----	-----	-----	-----	0.	-----	---

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 605	-175	86.	86.	7.	7.	4.	4.
1 835	-25	-25.	-----	13.	-----	0.	-----
1 845	-15	-----	-98.	-----	27.	-----	11.
1 1005	65	86.	-----	7.	-----	11.	-----
1 1015	75	-----	-25.	-----	-20.	-----	18.
1 1105	125	49.	-----	20.	-----	7.	-----
1 1115	135	-----	25.	-----	0.	-----	4.
1 1205	185	246.	-----	-53.	-----	21.	-----
1 1215	195	-----	0.	-----	13.	-----	0.
1 1305	245	123.	-----	47.	-----	0.	-----
1 1315	255	-----	-12.	-----	0.	-----	0.
1 1405	305	86.	-----	0.	-----	28.	-----
1 1415	315	-----	0.	-----	7.	-----	7.
1 1505	365	160.	-----	40.	-----	4.	-----
1 1515	375	-----	37.	-----	0.	-----	0.
1 1605	425	37.	-----	67.	-----	35.	-----
1 1615	435	-----	0.	-----	0.	-----	0.

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

DE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
T,024	PART,024	PART,042	PART,042	PART,075	PART,075	PART,133	PART,133
T/CC	PART/CC						
-023	TSI-023						
36.	1336.	174.	174.	133.	133.	72.	72.
-----	-----	-----	-----	-----	-----	-----	-----
5E 04	-----	6003.	-----	799.	-----	145.	-----
-----	1169.	-----	-696.	-----	-222.	-----	193.
4E 04	-----	3.8E 04	-----	2.3E 04	-----	1085.	-----
-----	501.	-----	435.	-----	-178.	-----	289.
04.	-----	2.0E 04	-----	3.9E 04	-----	2169.	-----
-----	1503.	-----	0.	-----	-133.	-----	0.
-----	-----	-----	-----	-----	-----	-----	-----
42.	-----	5481.	-----	4.6E 04	-----	4217.	-----
-----	0.	-----	0.	-----	222.	-----	24.
35.	-----	-435.	-----	4.4E 04	-----	6796.	-----
-----	0.	-----	-435.	-----	-133.	-----	-72.
02.	-----	-174.	-----	3.3E 04	-----	1.2E 04	-----
-----	-1002.	-----	609.	-----	0.	-----	48.
67.	-----	0.	-----	2.4E 04	-----	1.4E 04	-----
0.	-----	0.	-----	1.7E 04	-----	1.5E 04	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	0.	-----	0.	-----	0.	-----	193.

DE 2	SIDE 1	SIDE 2
.422	PART,750	PART,750
/CC	PART/CC	PART/CC
-023	TSI-023	TSI-023
7.	4.	4.
-----	0.	-----
27.	-----	11.
-----	11.	-----
20.	-----	18.
-----	7.	-----
0.	-----	4.
-----	21.	-----
13.	-----	0.
-----	0.	-----
0.	-----	0.
-----	28.	-----
7.	-----	7.
-----	4.	-----
0.	-----	0.
-----	35.	-----
0.	-----	0.

2

AFF- 99
PROPENE-NOX CONDITIONING
1981, JULY 13

0820: START FILL, WET: 6.0; DRY: 0.0
0932: INJECT 11.0 ML NO₂
0934: INJECT 12.0 ML NO
0936: INJECT 22.5 ML PROPENE
1000: UNCOVER BAG (T=0)

T=0 AT 1000 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	37.3	6.6	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER, SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479

CLOCK BY HR.	ELAPSED TIME (MIN)	OZONE D-1790	NO B-NOX-1	NO ₂ -UNC B-NOX-1	NOX-UNC B-NOX-1	T DEG C DORIC-1
1 950	-10	0.000	0.255	0.123	0.400	32.7
1 1400	240	0.700	0.083	0.201	0.300	42.0

----- NO DATA TAKEN

482

AFF-100

RJ4, VARIABLE FUEL
1981 JULY 14,15

DAY 1 (JULY 14)

0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 14.5
DRY BULB: 22.1 R.H.: 43%
0556: END FILL.
0622: INJECTED 18.0 ML. NO2
0624: INJECTED 5.0 ML. NO
0628: MIX BAG, DIVIDE BAG.
0639: INJECTED 624 MICROLITERS RJ-4 INTO SIDE A.
INJECTED 312 MICROLITERS RJ-4 INTO SIDE B.
BOTH THESE OPERATIONS AT 250 DEGREES C
FOR 30 MIN. INJECTED SIMULTANEOUSLY.
0714: MIX SIDE A AND SIDE B.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND WARM.
1515: HIGH CLOUDS FORMED ~1000 PST AND IT HAS BEEN
SOMEWHAT OVERCAST ALL DAY.
1620: END SAMPLING DAY 1

DAY 2 (JULY 15)

0900: UNCOVER BAG DAY 2.
0905: WEATHER: VERY CLOUDY, SOME LIGHT SPRINKLES.
1520: SAMPLING ENDED, RUN OVER.

NOTE: WEATHER REMAINED CLOUDY ALL DAY, BUT NO RAIN.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	38(+2)	32(+4)
AVG.UV(MW/CM2)	2.1(+0.8)	1.4(+0.7)

T=0 AT 900 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	33.4	5.7	DEG C
T	DORIC-1	33.4	5.6	DEG C
UV RAD	EPPLEY-2	1.74	0.82	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.101	PPM
NO	B-NOX-1	0.102	PPM
NO2-UNC	B-NOX-1	0.372	PPM
NO2-UNC	B-NOX-1	0.372	PPM
THC	BK6800-1	63.30	PPMC
THC	BK6800-1	36.20	PPMC

483

AFF-100
RJ4, VARIABLE FUEL
1981 JULY 14,15

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12° 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
250	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-100
RJ4, VARIABLE FUEL
1981 JULY 14,15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX- PP B-NO
1 605	-175	0.000	0.000	0.015	0.015	0.006	0.006	0.
1 835	-25	0.000	-----	0.101	-----	0.372	-----	0.
1 845	-15	-----	0.000	-----	0.102	-----	0.372	---
1 1005	65	0.057	-----	0.058	-----	0.370	-----	0.
1 1015	75	-----	0.050	-----	0.059	-----	0.379	---
1 1105	125	0.130	-----	0.030	-----	0.353	-----	0.
1 1115	135	-----	0.102	-----	0.037	-----	0.370	---
1 1205	185	0.269	-----	0.020	-----	0.279	-----	0.
1 1215	195	-----	0.177	-----	0.025	-----	0.341	---
1 1305	245	0.466	-----	0.020	-----	0.115	-----	0.
1 1315	255	-----	0.286	-----	0.021	-----	0.279	---
1 1405	305	0.482	-----	0.019	-----	0.039	-----	0.
1 1415	315	-----	0.392	-----	0.018	-----	0.161	---
1 1505	365	0.459	-----	0.019	-----	0.028	-----	0.
1 1515	375	-----	0.449	-----	0.019	-----	0.078	---
1 1605	425	0.432	-----	0.015	-----	0.023	-----	0.
1 1615	435	-----	0.443	-----	0.018	-----	0.041	---
<hr/>								
2 835	1415	0.326	-----	0.010	-----	0.015	-----	0.
2 845	1425	-----	0.345	-----	0.009	-----	0.019	---
2 1005	1505	0.308	-----	0.010	-----	0.019	-----	0.
2 1015	1515	-----	0.327	-----	0.012	-----	0.019	---
2 1105	1565	0.293	-----	0.010	-----	0.019	-----	0.
2 1115	1575	-----	0.311	-----	0.009	-----	0.025	---
2 1205	1625	0.277	-----	0.005	-----	0.020	-----	0.
2 1215	1635	-----	0.300	-----	0.007	-----	0.021	---
2 1305	1685	0.262	-----	0.009	-----	0.021	-----	0.
2 1315	1695	-----	0.287	-----	0.005	-----	0.027	---
2 1405	1745	0.246	-----	0.009	-----	0.029	-----	0.
2 1415	1755	-----	0.270	-----	0.010	-----	0.029	---
2 1505	1805	0.234	-----	0.009	-----	0.029	-----	0.
2 1515	1815	-----	0.259	-----	0.010	-----	0.030	---

----- NO DATA TAKEN

587

12 NOV 1981
PAGE 3

	SIDE 1 NO2-UNC PPM	SIDE 2 NO2-UNC PPM	SIDE 1 NOX-UNC PPM	SIDE 2 NOX-UNC PPM	SIDE 1 THC PPMC	SIDE 2 THC PPMC
X-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	BK6800-1	BK6800-1
015	0.006	0.006	0.016	0.016	0.08	0.08
---	0.372	-----	0.491	-----	63.30	-----
02	-----	0.372	-----	0.495	-----	36.20
059	0.370	-----	0.439	-----	62.10	-----
---	0.379	-----	0.450	-----	33.90	-----
037	0.353	-----	0.388	-----	61.50	-----
---	0.370	-----	0.417	-----	34.30	-----
025	0.279	-----	0.291	-----	59.40	-----
---	0.341	-----	0.360	-----	32.80	-----
021	0.115	-----	0.131	-----	57.20	-----
---	0.279	-----	0.300	-----	32.10	-----
018	0.039	-----	0.048	-----	55.40	-----
---	0.161	-----	0.179	-----	30.20	-----
019	0.028	-----	0.040	-----	55.00	-----
---	0.078	-----	0.089	-----	28.90	-----
018	0.023	-----	0.038	-----	56.20	-----
---	0.041	-----	0.052	-----	28.20	-----
009	0.015	-----	0.021	-----	54.80	-----
---	0.019	-----	0.023	-----	27.80	-----
012	0.019	-----	0.025	-----	54.20	-----
---	0.019	-----	0.026	-----	27.70	-----
009	0.025	-----	0.025	-----	54.40	-----
---	0.020	-----	0.030	-----	28.00	-----
007	0.020	-----	0.027	-----	54.60	-----
---	0.021	-----	0.028	-----	27.90	-----
005	0.021	-----	0.029	-----	54.30	-----
---	0.027	-----	0.030	-----	27.50	-----
010	0.029	-----	0.031	-----	54.50	-----
---	0.029	-----	0.031	-----	27.80	-----
010	0.029	-----	0.031	-----	54.10	-----
---	0.030	-----	0.032	-----	27.80	-----

2

AFF-100

RJ4, VARIABLE FUEL
1981 JULY 14,15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2	SIDE 1	SIDE 2	SIDE 1	SII
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC EPPLEY-2	CONDENS 10E3/CC CNC-143	PART/CC CLIMET	*PART>,3 PART CL1
1 605	-175	21.9	21.9	-----	0.0	0.0	0.	---
1 835	-25	31.0	-----	-----	13.0	-----	0.	---
1 845	-15	-----	32.3	-----	-----	20.0	-----	---
1 1005	65	35.3	-----	1.91	13.0	-----	3.	---
1 1015	75	-----	36.0	1.91	-----	17.6	-----	---
1 1105	125	38.0	-----	3.09	11.2	-----	312.	---
1 1115	135	-----	38.6	3.19	-----	15.0	-----	12
1 1205	185	39.6	-----	2.68	9.0	-----	456.	---
1 1215	195	-----	39.9	3.19	-----	12.2	-----	37
1 1305	245	41.4	-----	2.63	7.9	-----	486.	---
1 1315	255	-----	40.2	2.14	-----	10.0	-----	45
1 1405	305	37.2	-----	1.41	6.0	-----	494.	---
1 1415	315	-----	37.1	1.68	-----	8.1	-----	47
1 1505	365	36.9	-----	1.46	4.7	-----	490.	---
1 1515	375	-----	36.2	1.14	-----	6.5	-----	48
1 1605	425	36.6	-----	1.32	3.6	-----	483.	---
1 1615	435	-----	37.1	1.18	-----	5.0	-----	48
486	2 835	1415	24.9	-----	0.0	-----	273.	---
	2 845	1425	-----	24.4	-----	0.2	-----	33
	2 1005	1505	27.1	-----	0.72	0.1	-----	234.
	2 1015	1515	-----	27.1	0.68	-----	0.1	30
	2 1105	1565	28.4	-----	0.89	0.2	-----	214.
	2 1115	1575	-----	29.0	0.89	-----	0.0	27
	2 1205	1625	29.2	-----	0.77	0.2	-----	200.
	2 1215	1635	-----	29.0	0.72	-----	0.0	23
	2 1305	1685	32.4	-----	1.73	0.2	-----	223.
	2 1315	1695	-----	33.1	1.96	-----	0.0	20
	2 1405	1745	38.2	-----	3.19	0.4	-----	148.
	2 1415	1755	-----	36.8	2.00	-----	0.0	17
	2 1505	1805	35.8	-----	1.50	0.4	-----	190.
	2 1515	1815	-----	35.7	1.28	-----	0.0	14

----- NO DATA TAKEN

12 NOV 1981

PAGE 4

DE 1 DENS 3/CC -143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.0	0.	0.	0.	0.	0.	0.
3.0	-----	0.	-----	0.	-----	0.	-----
-----	20.0	-----	0.	-----	0.	-----	0.
3.0	-----	3.	-----	0.	-----	0.	-----
-----	17.6	-----	0.	-----	0.	-----	0.
1.2	-----	312.	-----	45.	-----	0.	-----
-----	15.0	-----	125.	-----	1.	-----	0.
9.0	-----	456.	-----	290.	-----	45.	-----
-----	12.2	-----	371.	-----	93.	-----	0.
7.9	-----	486.	-----	404.	-----	176.	-----
-----	10.0	-----	452.	-----	271.	-----	31.
6.0	-----	494.	-----	416.	-----	192.	-----
-----	8.1	-----	476.	-----	369.	-----	123.
4.7	-----	490.	-----	400.	-----	161.	-----
-----	6.5	-----	483.	-----	395.	-----	161.
3.6	-----	483.	-----	378.	-----	129.	-----
-----	5.0	-----	483.	-----	390.	-----	151.
0.0	-----	273.	-----	21.	-----	0.	-----
-----	0.2	-----	337.	-----	80.	-----	1.
0.1	-----	234.	-----	35.	-----	0.	-----
-----	0.1	-----	302.	-----	65.	-----	1.
0.2	-----	214.	-----	61.	-----	0.	-----
-----	0.0	-----	270.	-----	60.	-----	1.
0.2	-----	200.	-----	53.	-----	1.	-----
-----	0.0	-----	237.	-----	62.	-----	1.
0.2	-----	223.	-----	40.	-----	1.	-----
-----	0.0	-----	203.	-----	82.	-----	1.
0.4	-----	148.	-----	37.	-----	1.	-----
-----	0.0	-----	171.	-----	152.	-----	5.
0.4	-----	190.	-----	49.	-----	2.	-----
-----	0.0	-----	141.	-----	136.	-----	6.

2

AFF-100
RJ4, VARIABLE FUEL
1981 JULY 14,15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
		RSCAT	BSCAT	AER.V	AER.V	AER.N	AER.N	AER
		10-4 M-1	10-4 M-1	UM3/CC	UM3/CC	PART/CC	PART/CC	UM2A
1 605	-175	0.0	0.0	1.	1.	-2705.	-2705.	8
1 725	-95	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.0	-----	5.	-----	3.7E 04	-----	126
1 845	-15	-----	0.0	-----	4.	-----	6.8E 04	-----
1 1005	65	6.2	-----	19.	-----	6.3E 04	-----	124
1 1015	75	-----	5.0	-----	16.	-----	7.2E 04	-----
1 1105	125	25.0	-----	31.	-----	6.9E 04	-----	1655
1 1115	135	-----	15.0	-----	25.	-----	9.1E 04	-----
1 1205	185	58.0	-----	31.	-----	7.2E 04	-----	1903
1 1215	195	-----	30.0	-----	26.	-----	6.9E 04	-----
1 1305	245	96.0	-----	46.	-----	7.5E 04	-----	2272
1 1315	255	-----	52.0	-----	39.	-----	7.1E 04	-----
1 1405	305	98.0	-----	52.	-----	6.0E 04	-----	2211
1 1415	315	-----	78.0	-----	48.	-----	5.6E 04	-----
1 1505	365	82.0	-----	38.	-----	5.3E 04	-----	1731
1 1515	375	-----	87.0	-----	32.	-----	6.8E 04	-----
1 1605	425	68.0	-----	38.	-----	3.6E 04	-----	1468
1 1615	435	-----	80.0	-----	34.	-----	5.6E 04	-----
2 710	1330	-----	-----	-----	-----	-----	-----	-----
2 835	1415	2.0	-----	7.	-----	352.	-----	8
2 845	1425	-----	5.8	-----	7.	-----	3711.	-----
2 1005	1505	2.1	-----	5.	-----	574.	-----	6
2 1015	1515	-----	5.5	-----	4.	-----	2216.	-----
2 1105	1565	1.1	-----	3.	-----	499.	-----	5
2 1115	1575	-----	5.1	-----	4.	-----	1229.	-----
2 1205	1625	1.8	-----	5.	-----	1389.	-----	7
2 1215	1635	-----	4.8	-----	2.	-----	1800.	-----
2 1305	1685	1.3	-----	-478.	-----	-424.	-----	-381
2 1315	1695	-----	3.5	-----	3.	-----	1878.	-----
2 1405	1745	2.5	-----	-1.	-----	3118.	-----	4
2 1415	1755	-----	3.0	-----	-519.	-----	-802.	-----
2 1505	1805	3.8	-----	4.	-----	3641.	-----	12
2 1515	1815	-----	3.0	-----	2.	-----	2273.	-----

----- NO DATA TAKEN

487

12 NOV 1981
PAGE 5

DE 2 R.N T/CC -023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 RJ-4(A) PPMC VAR 3700	SIDE 2 RJ-4(A) PPMC VAR 3700
05.	8.	8.	-----	-----
-----	-----	-----	-----	1.687
-----	126.	-----	3.230	-----
8E 04	-----	267.	-----	-----
-----	1244.	-----	3.175	-----
2E 04	-----	1158.	-----	-----
-----	1655.	-----	-----	-----
1E 04	-----	1430.	-----	1.686
-----	1903.	-----	2.876	-----
9E 04	-----	1551.	-----	-----
-----	2272.	-----	-----	-----
1E 04	-----	1780.	-----	1.642
-----	2211.	-----	-----	-----
6E 04	-----	2173.	-----	-----
-----	1737.	-----	2.796	-----
8E 04	-----	1797.	-----	-----
-----	1468.	-----	-----	-----
6E 04	-----	1557.	-----	1.589
-----	-----	-----	-----	1.348
-----	85.	-----	-----	-----
11.	-----	141.	-----	-----
-----	67.	-----	2.759	-----
16.	-----	114.	-----	-----
-----	54.	-----	-----	-----
29.	-----	105.	-----	1.401
-----	72.	-----	-----	-----
00.	-----	89.	-----	1.479
-----	-3818.	-----	-----	-----
78.	-----	74.	-----	-----
-----	40.	-----	2.661	-----
02.	-----	-4135.	-----	-----
-----	120.	-----	-----	-----
73.	-----	81.	-----	1.382

AFF-100

RJ4, VARIABLE FUEL

1981 JULY 14,15

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SI P VAR
		RJ-4(R) PPMC	VAR 3700	RJ-4(B) PPMC	VAR 3700	RJ-4(C) PPMC	VAR 3700	RJ-4(C) PPMC	VAR 3700	RJ-4(D) PPMC	VAR 3700	RJ-4(D) PPMC	VAR 3700	
1 725	-95	-----	1.231	-----	1.703	-----	2.562	---						
1 835	-25	2.392	-----	3.464	-----	3.914	-----	9						
1 1005	65	2.369	-----	3.503	-----	3.864	-----	8						
1 1115	135	-----	1.275	-----	1.829	-----	1.998	---						
1 1205	105	2.152	-----	3.144	-----	3.323	-----	8						
1 1315	255	-----	1.247	-----	1.875	-----	1.949	---						
1 1505	365	2.143	-----	3.084	-----	3.196	-----	7						
1 1615	435	-----	1.228	-----	1.784	-----	1.837	---						
2 710	1330	-----	1.181	-----	2.013	-----	1.701	---						
2 1005	1505	2.091	-----	3.057	-----	3.140	-----	7						
2 1115	1575	-----	1.067	-----	1.575	-----	1.603	---						
2 1215	1635	-----	1.161	-----	1.681	-----	1.695	---						
2 1405	1745	2.030	-----	2.932	-----	3.005	-----	7						
2 1515	1815	-----	1.076	-----	1.535	-----	1.574	---						

----- NO DATA TAKEN

488

12 NOV 1981
PAGE 6

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	RJ-4(D)	RJ-4(D)	RJ-4(E)	RJ-4(E)	RJ-4(F)	RJ-4(F)
	PPMC	PPMC	PPMC	PPMC	PPMC	PPMC
00	VAR 3700					
3	-----	2.562	-----	4.351	-----	1.572
-	3.914	-----	9.087	-----	3.078	-----
-	3.864	-----	8.975	-----	3.044	-----
9	-----	1.998	-----	4.827	-----	1.653
-	3.323	-----	8.098	-----	2.789	-----
5	-----	1.949	-----	4.807	-----	1.701
-	3.196	-----	7.546	-----	2.601	-----
4	-----	1.837	-----	4.378	-----	1.573
3	-----	1.701	-----	3.785	-----	1.311
-	3.140	-----	7.514	-----	2.481	-----
5	-----	1.603	-----	3.729	-----	1.217
1	-----	1.695	-----	3.996	-----	1.314
-	3.005	-----	7.168	-----	2.360	-----
5	-----	1.574	-----	3.678	-----	1.229

J

AFF-100
 RJ4, VARIABLE FUEL
 1981 JULY 14-15

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		RJ-4(G) PPMC VAR 3700	RJ-4(G) PPMC VAR 3700	CO PPM BK6800-1	CO PPM BK6800-1	PAN PPM ECD-3	PAN PPM ECD-3	HC PP C
1 605	-175	-----	-----	1.66	1.66	0.001	0.001	---
1 725	-95	-----	2.479	-----	-----	-----	-----	---
1 811	-49	-----	-----	-----	-----	-----	-----	0.
1 835	-25	3.825	-----	1.78	-----	0.001	-----	---
1 845	-15	-----	-----	-----	1.82	-----	0.000	---
1 1005	65	3.770	-----	1.80	-----	0.003	-----	---
1 1015	75	-----	-----	-----	1.81	-----	0.003	---
1 1105	125	-----	-----	1.69	-----	0.005	-----	---
1 1115	135	-----	2.774	-----	1.85	-----	0.004	---
1 1200	180	-----	-----	-----	-----	-----	-----	0.
1 1205	185	2.780	-----	1.82	-----	0.006	-----	---
1 1215	195	-----	-----	-----	1.83	-----	0.005	---
1 1305	245	-----	-----	1.81	-----	0.011	-----	---
1 1315	255	-----	2.364	-----	1.86	-----	0.009	---
1 1405	305	-----	-----	1.87	-----	0.013	-----	---
1 1415	315	-----	-----	-----	1.89	-----	0.011	---
1 1505	365	3.492	-----	1.84	-----	0.008	-----	---
1 1515	375	-----	-----	-----	1.92	-----	0.013	---
1 1605	425	-----	-----	1.90	-----	0.006	-----	---
1 1610	430	-----	-----	-----	-----	-----	-----	0.
1 1615	435	-----	1.838	-----	1.93	-----	0.014	---
60	2 710	1330	-----	1.843	-----	-----	-----	---
	2 810	1390	-----	-----	-----	-----	-----	0.
	2 835	1415	-----	1.87	-----	0.000	-----	---
	2 845	1425	-----	-----	1.95	-----	0.000	---
	2 1005	1505	2.694	-----	1.91	-----	0.001	---
	2 1015	1515	-----	-----	1.98	-----	0.002	---
	2 1105	1565	-----	2.01	-----	0.002	-----	---
	2 1115	1575	-----	1.952	-----	1.97	-----	0.003
	2 1200	1620	-----	-----	-----	-----	-----	0.
	2 1205	1625	-----	1.96	-----	0.003	-----	---
	2 1215	1635	-----	1.890	-----	1.97	-----	0.004
	2 1305	1685	-----	1.98	-----	-----	-----	---
	2 1315	1695	-----	-----	1.99	-----	0.003	---
	2 1405	1745	3.405	-----	1.87	-----	0.005	---
	2 1415	1755	-----	-----	1.88	-----	0.005	---
	2 1505	1805	-----	2.00	-----	0.005	-----	---
	2 1510	1810	-----	-----	-----	-----	-----	0.
	2 1515	1815	-----	1.578	-----	2.02	-----	0.005

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

SIDE 1 FAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
0.001	0.001	-----	-----	-2338.	-2338.
-----	-----	-----	-----	-----	-----
-----	-----	0.040	0.004	-----	-----
0.001	-----	-----	-----	3.4E 04	-----
-----	0.000	-----	-----	-----	5.1E 04
0.003	-----	-----	-----	-167.	-----
-----	0.003	-----	-----	-----	0.
0.005	-----	-----	-----	1002.	-----
-----	0.004	-----	-----	-----	2.3E 04
-----	-----	0.027	0.010	-----	-----
0.006	-----	-----	-----	501.	-----
-----	0.005	-----	-----	-----	-1336.
0.011	-----	-----	-----	7014.	-----
-----	0.009	-----	-----	-----	2672.
0.013	-----	-----	-----	2004.	-----
-----	0.011	-----	-----	-----	501.
0.008	-----	-----	-----	7515.	-----
-----	0.013	-----	-----	-----	4676.
0.006	-----	-----	-----	668.	-----
-----	-----	0.042	0.027	-----	-----
-----	0.014	-----	-----	-----	167.
-----	-----	-----	-----	-----	-----
-----	-----	0.054	0.031	-----	-----
0.000	-----	-----	-----	-835.	-----
-----	0.000	-----	-----	-----	1336.
0.001	-----	-----	-----	-668.	-----
-----	0.002	-----	-----	-----	-167.
0.002	-----	-----	-----	-668.	-----
-----	0.003	-----	-----	-----	-334.
-----	-----	0.050	0.031	-----	-----
0.003	-----	-----	-----	334.	-----
-----	0.004	-----	-----	-----	167.
-----	-----	-----	-----	501.	-----
-----	0.003	-----	-----	-----	-167.
0.005	-----	-----	-----	1169.	-----
-----	0.005	-----	-----	-----	167.
0.005	-----	-----	-----	334.	-----
-----	-----	0.059	0.031	-----	-----
-----	0.005	-----	-----	-----	334.

2

AFF-100

RJ4, VARIABLE FUEL
1981 JULY 14,15

CLOCK DY	CLOCK HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023
1	605	-175	-609.	-609.	222.	222.	0.	0.	0.	0.	0.
1	835	-25	2175.	-----	666.	-----	120.	-----	-----	-----	-37
1	845	-15	-----	1.4E 04	-----	3596.	-----	167.	-----	-----	-----
1	1005	65	6351.	-----	5.2E 04	-----	4555.	-----	-----	-----	123
1	1015	75	-----	1.5E 04	-----	5.5E 04	-----	1350.	-----	-----	-----
1	1105	125	1392.	-----	5.6E 04	-----	1.1E 04	-----	1350.	-----	135
1	1115	135	-----	-7482.	-----	6.1E 04	-----	5712.	-----	-----	-----
1	1205	185	1740.	-----	5.2E 04	-----	1.8E 04	-----	-----	-----	111
1	1215	195	-----	957.	-----	6.2E 04	-----	7399.	-----	-----	-----
1	1305	245	-522.	-----	4.2E 04	-----	2.6E 04	-----	-----	-----	246
1	1315	255	-----	87.	-----	5.6E 04	-----	1.2E 04	-----	-----	-----
1	1405	305	-1566.	-----	3.2E 04	-----	2.7E 04	-----	-----	-----	517
1	1415	315	-----	1392.	-----	2.3E 04	-----	3.1E 04	-----	-----	-----
1	1505	365	-2610.	-----	2.8E 04	-----	2.0E 04	-----	-----	-----	640
1	1515	375	-----	2610.	-----	4.2E 04	-----	1.8E 04	-----	-----	-----
1	1605	425	0.	-----	1.7E 04	-----	1.9E 04	-----	-----	-----	246
1	1615	435	-----	3393.	-----	3.8E 04	-----	1.4E 04	-----	-----	-----
40 490	2 835	1415	435.	-----	222.	-----	554.	-----	-----	-----	-98
	2 845	1425	-----	-348.	-----	888.	-----	1856.	-----	-----	-----
	2 1005	1505	870.	-----	89.	-----	217.	-----	-----	-----	12
	2 1015	1515	-----	174.	-----	799.	-----	1301.	-----	-----	-----
	2 1105	1565	348.	-----	622.	-----	48.	-----	-----	-----	135
	2 1115	1575	-----	-1131.	-----	1643.	-----	964.	-----	-----	-----
	2 1205	1625	261.	-----	355.	-----	337.	-----	-----	-----	74
	2 1215	1635	-----	174.	-----	400.	-----	916.	-----	-----	-----
	2 1305	1685	174.	-----	755.	-----	337.	-----	-----	-----	-12
	2 1315	1695	-----	174.	-----	1199.	-----	651.	-----	-----	-----
	2 1405	1745	87.	-----	1288.	-----	603.	-----	-----	-----	-25
	2 1415	1755	-----	174.	-----	622.	-----	627.	-----	-----	-----
	2 1505	1805	174.	-----	1998.	-----	1084.	-----	-----	-----	37
	2 1515	1815	-----	348.	-----	932.	-----	554.	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
075	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
CC	PART/DC	PART/CC	PART/CC	PART/DC	PART/CC	PART/CC
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
.	0.	0.	0.	0.	20.	20.
--	120.	-----	-37.	-----	20.	-----
.	-----	169.	-----	49.	-----	13.
--	4555.	-----	123.	-----	27.	-----
04	-----	1350.	-----	61.	-----	20.
--	1.1E 04	-----	135.	-----	13.	-----
04	-----	5712.	-----	25.	-----	13.
--	1.8E 04	-----	111.	-----	-47.	-----
04	-----	7399.	-----	37.	-----	27.
--	2.6E 04	-----	246.	-----	-20.	-----
04	-----	1.2E 04	-----	0.	-----	93.
--	2.7E 04	-----	517.	-----	7.	-----
04	-----	3.1E 04	-----	62.	-----	7.
--	2.0E 04	-----	640.	-----	13.	-----
04	-----	1.8E 04	-----	86.	-----	13.
--	1.9E 04	-----	246.	-----	47.	-----
04	-----	1.4E 04	-----	86.	-----	20.
.	554.	-----	-98.	-----	53.	-----
--	-----	1856.	-----	25.	-----	-80.
.	217.	-----	12.	-----	40.	-----
--	-----	1301.	-----	98.	-----	7.
.	48.	-----	135.	-----	7.	-----
--	-----	964.	-----	74.	-----	7.
.	337.	-----	74.	-----	13.	-----
--	-----	916.	-----	111.	-----	40.
.	337.	-----	-12.	-----	-7.	-----
--	-----	651.	-----	25.	-----	-13.
.	603.	-----	-25.	-----	7.	-----
--	-----	627.	-----	-61.	-----	40.
.	1084.	-----	37.	-----	7.	-----
--	-----	554	-----	61.	-----	47.

2

AFF-100
RJ4, VARIABLE FUEL
1981 JULY 14,15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2	
		PART.750	PART/CC	PART.750	PART/CC
		TSI-023	TSI-023		
1 605	-175	0.	0.		
1 835	-25	18.	-----		
1 845	-15	-----	7.		
1 1005	65	0.	-----		
1 1015	75	-----	0.		
1 1105	125	18.	-----		
1 1115	135	-----	18.		
1 1205	185	-7.	-----		
1 1215	195	-----	7.		
1 1305	245	18.	-----		
1 1315	255	-----	39.		
1 1405	305	39.	-----		
1 1415	315	-----	18.		
1 1505	365	11.	-----		
1 1515	375	-----	-4.		
1 1605	425	35.	-----		
1 1615	435	-----	32.		
2 835	1415	21.	-----		
2 845	1425	-----	35.		
2 1005	1505	14.	-----		
2 1015	1515	-----	4.		
2 1105	1565	7.	-----		
2 1115	1575	-----	7.		
2 1205	1625	14.	-----		
2 1215	1635	-----	-7.		
2 1305	1685	-2173.	-----		
2 1315	1695	-----	11.		
2 1405	1745	-11.	-----		
2 1415	1755	-----	-2369.		
2 1505	1805	7.	-----		
2 1515	1815	-----	-4.		

----- NO DATA TAKEN

AFF-101
JP-10: VARIABLE FUEL
1981, JULY 16-17

DAY 1 (JULY 16)

0445: START FILL, WET: 6.0; DRY: 0.0; WET BULB TEMP: 14.5C; DRY BULB TEMP: 22.
DEW POINT: 8.4C; RH=42%
0628: INJECTED 5 ML NO2
0630: INJECTED 18 ML NO
0632: DIVIDE BAG
0645: INJECTED 624 MICROLITERS JP10 INTO SIDE A
0702: INJECTED 312 MICROLITERS JP10 INTO SIDE B
0900: UNCOVERED BAG (T=0)
0905: WEATHER: SUNNY,CLEAR,WARM
1620: END SAMPLING, DAY 1

DAY 2 (JULY 21)

0900: UNCOVERED BAG
0905: WEATHER: SUNNY, CLEAR, WARM
1520: END SAMPLING, DAY 2; RUN OVER.

RESULTS	DAY 1	DAY 2
Avg.T(DEG.C)	38(+2)	39(+3)
Avg.UV(MW/CM2)	2.6(+0.7)	2.9(+0.7)

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	36.5	5.9	DEG C
T	DORIC-1	36.8	5.2	DEG C
UV RAD	EPPLEY-2	2.74	0.66	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.371	PPM
NO	B-NOX-1	0.375	PPM
NO2-UNC	B-NOX-1	0.119	PPM
NO2-UNC	B-NOX-1	0.115	PPM
JP-10	VAR 3700	4.5890	PPM
JP-10	VAR 3700	2.4770	PPM
			SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
1790	D-1790	IASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF-101
JP-10: VARIABLE FUEL
1981, JULY 16-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX-U PPM
1 605	-175	0.000	0.000	0.009	0.009	0.000	0.000	0.0
1 825	-35	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.000	-----	0.371	-----	0.119	-----	0.4
1 845	-15	-----	0.000	-----	0.375	-----	0.115	-----
1 1005	65	0.001	-----	0.305	-----	0.175	-----	0.4
1 1015	75	-----	0.002	-----	0.301	-----	0.175	-----
1 1105	125	0.005	-----	0.235	-----	0.221	-----	0.4
1 1115	135	-----	0.004	-----	0.240	-----	0.218	-----
1 1205	185	0.012	-----	0.161	-----	0.283	-----	0.4
1 1215	195	-----	0.011	-----	0.179	-----	0.271	-----
1 1305	245	0.028	-----	0.090	-----	0.350	-----	0.4
1 1315	255	-----	0.018	-----	0.119	-----	0.330	-----
1 1405	305	0.059	-----	-----	-----	0.389	-----	0.4
1 1415	315	-----	0.028	-----	0.071	-----	0.367	-----
1 1505	365	0.108	-----	0.023	-----	0.391	-----	0.4
1 1515	375	-----	0.046	-----	0.046	-----	0.385	-----
1 1605	425	0.156	-----	0.016	-----	0.375	-----	0.3
1 1615	435	-----	0.061	-----	0.030	-----	0.390	-----
2 710	1330	-----	-----	-----	-----	-----	-----	-----
2 835	1415	0.006	-----	0.009	-----	0.179	-----	0.1
2 845	1425	-----	0.007	-----	0.011	-----	0.330	-----
2 1005	1505	0.128	-----	0.011	-----	0.163	-----	0.1
2 1015	1515	-----	0.123	-----	0.021	-----	0.297	-----
2 1105	1565	0.249	-----	0.009	-----	0.147	-----	0.1
2 1115	1575	-----	0.207	-----	0.011	-----	0.279	-----
2 1205	1625	0.382	-----	0.010	-----	0.240	-----	0.3
2 1215	1635	-----	0.321	-----	0.008	-----	0.251	-----
2 1305	1685	0.492	-----	0.008	-----	0.099	-----	0.1
2 1315	1695	-----	0.449	-----	0.010	-----	0.222	-----
2 1405	1745	0.548	-----	0.008	-----	0.079	-----	0.0
2 1415	1755	-----	0.561	-----	0.010	-----	0.185	-----
2 1505	1805	0.553	-----	0.008	-----	0.061	-----	0.0
2 1515	1815	-----	0.624	-----	0.009	-----	0.142	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

E 2 0 M X-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 JP-10 PPM VAR 3700	SIDE 2 JP-10 PPM VAR 3700
009	0.000	0.000	0.001	0.001	-----	-----
---	-----	-----	-----	-----	4.404	-----
---	0.119	-----	0.491	-----	-----	-----
375	-----	0.115	-----	0.490	-----	2.377
---	0.175	-----	0.490	-----	4.764	-----
301	-----	0.175	-----	0.485	-----	-----
---	0.221	-----	0.472	-----	-----	-----
240	-----	0.218	-----	0.481	-----	2.327
---	0.283	-----	0.471	-----	4.291	-----
179	-----	0.271	-----	0.470	-----	-----
---	0.350	-----	0.451	-----	-----	-----
119	-----	0.330	-----	0.468	-----	2.373
---	0.389	-----	0.441	-----	-----	-----
071	-----	0.367	-----	0.452	-----	-----
---	0.391	-----	0.421	-----	4.256	-----
046	-----	0.385	-----	0.439	-----	-----
---	0.375	-----	0.397	-----	-----	-----
030	-----	0.390	-----	0.428	-----	2.155
---	-----	-----	-----	-----	4.283	-----
---	0.179	-----	0.188	-----	-----	-----
011	-----	0.330	-----	0.341	-----	2.252
---	0.163	-----	0.175	-----	4.468	-----
021	-----	0.297	-----	0.319	-----	-----
---	0.147	-----	0.153	-----	-----	-----
011	-----	0.279	-----	0.291	-----	2.216
---	0.240	-----	0.310	-----	4.354	-----
008	-----	0.251	-----	0.263	-----	-----
---	0.099	-----	0.105	-----	-----	-----
010	-----	0.222	-----	0.230	-----	-----
---	0.079	-----	0.084	-----	4.240	-----
010	-----	0.185	-----	0.190	-----	-----
---	0.061	-----	0.068	-----	-----	-----
009	-----	0.142	-----	0.151	-----	2.135

2

AFF-101

JP-10: VARIABLE FUEL
1981, JULY 16-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2 EFPLEY-2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143	*PART>.3 PART/CC CLIMET	*PART PART/ CLIM
1 605	-175	22.2	22.2	-----	0.0	0.0	0.	0.
1 835	-25	29.1	-----	-----	0.0	-----	0.	-----
1 845	-15	-----	31.7	-----	-----	1.3	-----	0.
1 1005	65	33.9	-----	2.14	0.0	-----	36.	-----
1 1015	75	-----	36.2	2.59	-----	1.6	-----	13.
1 1105	125	37.0	-----	3.09	0.1	-----	39.	-----
1 1115	135	-----	39.3	3.36	-----	1.3	-----	173.
1 1205	185	40.2	-----	3.23	0.0	-----	34.	-----
1 1215	195	-----	39.2	3.28	-----	1.2	-----	302.
1 1305	245	41.3	-----	3.23	0.0	-----	39.	-----
1 1315	255	-----	41.4	3.19	-----	0.8	-----	356.
1 1405	305	41.0	-----	2.59	0.0	-----	53.	-----
1 1415	315	-----	39.6	2.45	-----	0.7	-----	376.
1 1505	365	40.3	-----	2.09	0.0	-----	70.	-----
1 1515	375	-----	39.3	2.05	-----	0.5	-----	431.
1 1605	425	37.0	-----	1.59	0.0	-----	102.	-----
1 1615	435	-----	36.7	1.37	-----	0.4	-----	465.
2 835	1415	27.5	-----	-----	0.0	-----	41.	-----
2 845	1425	-----	29.3	-----	-----	0.0	-----	28.
2 1005	1505	33.4	-----	2.23	0.0	-----	68.	-----
2 1015	1515	-----	35.1	3.09	-----	0.0	-----	18.
2 1105	1565	36.0	-----	3.91	0.3	-----	189.	-----
2 1115	1575	-----	38.3	3.87	-----	0.0	-----	51.
2 1205	1625	39.7	-----	3.19	0.7	-----	364.	-----
2 1215	1635	-----	39.6	3.28	-----	0.1	-----	169.
2 1305	1685	42.8	-----	3.28	0.8	-----	419.	-----
2 1315	1695	-----	42.1	3.14	-----	0.3	-----	229.
2 1405	1745	41.9	-----	2.54	0.8	-----	427.	-----
2 1415	1755	-----	40.1	2.45	-----	0.5	-----	331.
2 1505	1805	40.0	-----	2.09	0.5	-----	405.	-----
2 1515	1815	-----	39.1	2.05	-----	0.6	-----	380.

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	0.	-----	0.	-----	0.	-----
1.3	-----	0.	-----	0.	-----	0.
-----	36.	-----	1.	-----	0.	-----
1.6	-----	13.	-----	0.	-----	0.
-----	39.	-----	33.	-----	0.	-----
1.3	-----	173.	-----	10.	-----	0.
-----	34.	-----	32.	-----	1.	-----
1.2	-----	302.	-----	69.	-----	0.
-----	39.	-----	31.	-----	18.	-----
0.8	-----	356.	-----	131.	-----	4.
-----	53.	-----	41.	-----	2.	-----
0.7	-----	376.	-----	165.	-----	8.
-----	70.	-----	51.	-----	18.	-----
0.5	-----	431.	-----	189.	-----	12.
-----	102.	-----	70.	-----	6.	-----
0.4	-----	465.	-----	182.	-----	17.
-----	41.	-----	1.	-----	0.	-----
0.0	-----	28.	-----	26.	-----	0.
-----	68.	-----	5.	-----	2.	-----
0.0	-----	18.	-----	17.	-----	13.
-----	189.	-----	81.	-----	17.	-----
0.0	-----	51.	-----	23.	-----	13.
-----	364.	-----	215.	-----	40.	-----
0.1	-----	169.	-----	116.	-----	13.
-----	419.	-----	285.	-----	56.	-----
0.3	-----	229.	-----	166.	-----	32.
-----	427.	-----	297.	-----	60.	-----
0.5	-----	331.	-----	206.	-----	50.
-----	405.	-----	280.	-----	51.	-----
0.6	-----	380.	-----	240.	-----	55.

2

AFF-101
JP-10: VARIABLE FUEL
1981, JULY 16-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT MRI-388	SIDE 2 BSCAT MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/C TSI-02
1 605	-175	0.2	0.2	1.	1.	-1728.	-1728.	15.
1 835	-25	0.4	----	2.	----	407.	----	28.
1 845	-15	----	0.5	----	2.	----	2208.	----
1 1005	65	1.1	----	10.	----	1039.	----	86.
1 1015	75	----	3.2	----	5.	----	5034.	----
1 1105	125	0.5	----	1.	----	365.	----	14.
1 1115	135	----	5.6	----	11.	----	8715.	----
1 1205	185	0.9	----	2.	----	-796.	----	9.
1 1215	195	----	9.1	----	9.	----	8271.	----
1 1305	245	1.0	----	2.	----	449.	----	21.
i 1315	255	----	13.0	----	12.	----	7475.	----
1 1405	305	1.5	----	2.	----	223.	----	-4.
1 1415	315	----	15.0	----	14.	----	8114.	----
1 1505	365	2.0	----	1.	----	-75.	----	21.
1 1515	375	----	14.0	----	16.	----	4287.	----
1 1605	425	2.5	----	4.	----	1809.	----	59.
1 1615	435	----	17.0	----	-2.	----	4225.	----
2 835	1415	1.1	----	3.	----	468.	----	41.
2 845	1425	----	1.1	----	1.	----	768.	----
2 1005	1505	2.0	----	-8.	----	-102.	----	-49.
2 1015	1515	----	1.1	----	5.	----	336.	----
2 1105	1565	4.2	----	9.	----	1310.	----	140.
2 1115	1575	----	1.3	----	2.	----	477.	----
2 1205	1625	11.0	----	22.	----	2675.	----	319.
2 1215	1635	----	4.0	----	2.	----	982.	----
2 1305	1685	14.0	----	13.	----	6122.	----	313.
2 1315	1695	----	6.0	----	-11.	----	70.	----
2 1405	1745	14.5	----	14.	----	4808.	----	320.
2 1415	1755	----	9.5	----	6.	----	2921.	----
2 1505	1805	15.0	----	8.	----	1536.	----	210.
2 1515	1815	----	12.5	----	12.	----	4511.	----

----- NO DATA TAKEN

12 NOV 1961
PAGE 4

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3
-1728.	-1728.	15.	15.	-----	-----
407.	-----	28.	-----	0.001	-----
-----	2208.	-----	38.	-----	0.000
1039.	-----	86.	-----	0.001	-----
-----	5034.	-----	213.	-----	0.001
365.	-----	14	-----	0.001	-----
-----	8715.	-----	327.	-----	0.001
-796.	-----	9.	-----	0.002	-----
-----	8271.	-----	311.	-----	0.001
449.	-----	21.	-----	0.002	-----
-----	7475.	-----	365.	-----	0.001
223.	-----	-4.	-----	0.001	-----
-----	8114.	-----	356.	-----	0.001
-75.	-----	21.	-----	0.004	-----
-----	4287.	-----	340.	-----	0.002
1809.	-----	59.	-----	0.004	-----
-----	4225.	-----	182.	-----	0.002
468.	-----	41.	-----	0.009	-----
-----	768.	-----	36.	-----	0.005
-102.	-----	-49.	-----	0.009	-----
-----	336.	-----	56.	-----	0.006
1310.	-----	140.	-----	0.011	-----
-----	477.	-----	40.	-----	0.007
2675.	-----	319.	-----	0.012	-----
-----	982.	-----	53.	-----	0.010
6122.	-----	313.	-----	0.013	-----
-----	70.	-----	-61.	-----	0.012
4808.	-----	320.	-----	0.015	-----
-----	2921.	-----	186.	-----	0.017
1536.	-----	210.	-----	0.015	-----
-----	4511.	-----	273.	-----	0.022

2

AFF-101

JP-10: VARIABLE FUEL
1981, JULY 16-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1	
		HCHO PPM CA	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023									
1 605	-175	-----	-----	-2171.	-2171.	174.	174.	174.	174.	174.	174.	174.	174.	222	
1 810	-50	0.015	0.000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 835	-25	-----	-----	-167.	-----	174.	174.	174.	174.	174.	174.	174.	174.	400	
1 845	-15	-----	-----	-----	-----	1336.	1336.	1336.	1336.	1336.	1336.	1336.	1336.	-----	
1 1005	65	-----	-----	501.	501.	522.	522.	522.	522.	522.	522.	522.	522.	44	
1 1015	75	-----	-----	-----	-----	-1336.	-1336.	-1336.	-1336.	-1336.	-1336.	-1336.	-1336.	-----	
1 1105	125	-----	-----	167.	167.	87.	87.	87.	87.	87.	87.	87.	87.	89	
1 1115	135	-----	-----	-----	-----	334.	334.	334.	334.	334.	334.	334.	334.	-----	
1 1200	180	0.008	0.002	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1205	185	-----	-----	-167.	-167.	-522.	-522.	-522.	-522.	-522.	-522.	-522.	-522.	-444	
1 1215	195	-----	-----	-----	-----	167.	167.	167.	167.	167.	167.	167.	167.	-----	
1 1305	145	-----	-----	0.	0.	174.	174.	174.	174.	174.	174.	174.	174.	178	
1 1315	255	-----	-----	-----	-----	167.	167.	167.	167.	167.	167.	167.	167.	-----	
1 1405	305	-----	-----	167.	167.	87.	87.	87.	87.	87.	87.	87.	87.	89	
1 1415	315	-----	-----	-----	-----	835.	835.	835.	835.	835.	835.	835.	835.	1653.	
1 1505	365	-----	-----	-668.	-668.	435.	435.	435.	435.	435.	435.	435.	435.	89	
1 1515	375	-----	-----	-----	-----	-1169.	-1169.	-1169.	-1169.	-1169.	-1169.	-1169.	-1169.	174.	
1 1605	425	-----	-----	1837.	1837.	-261.	-261.	-261.	-261.	-261.	-261.	-261.	-261.	-400	
1 1610	430	0.017	0.008	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1615	435	-----	-----	-----	-----	-835.	-835.	-835.	-835.	-835.	-835.	-835.	-835.	522.	
496	2 810	1390	0.029	0.030	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2 835	1415	-----	-----	167.	167.	-87.	-87.	-87.	-87.	-87.	-87.	-87.	0	
	2 845	1425	-----	-----	-----	501.	501.	501.	501.	501.	501.	501.	501.	87.	
	2 1005	1505	-----	-----	-668.	-668.	435.	435.	435.	435.	435.	435.	435.	89	
	2 1015	1515	-----	-----	-----	334.	334.	334.	334.	334.	334.	334.	334.	-261.	
	2 1105	1565	-----	-----	-501.	-501.	174.	174.	174.	174.	174.	174.	174.	311	
	2 1115	1575	-----	-----	-----	-668.	-668.	-668.	-668.	-668.	-668.	-668.	-668.	957.	
	2 1200	1620	0.046	0.036	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2 1205	1625	-----	-----	1169.	1169.	-1914.	-1914.	-1914.	-1914.	-1914.	-1914.	-1914.	266	
	2 1215	1635	-----	-----	-----	0.	0.	0.	0.	0.	0.	0.	0.	87.	
	2 1305	1685	-----	-----	2004.	2004.	-783.	-783.	-783.	-783.	-783.	-783.	-783.	1066	
	2 1315	1695	-----	-----	-----	-1503.	-1503.	-1503.	-1503.	-1503.	-1503.	-1503.	-1503.	522.	
	2 1405	1745	-----	-----	-501.	-501.	870.	870.	870.	870.	870.	870.	870.	710	
	2 1415	1755	-----	-----	-----	-334.	-334.	-334.	-334.	-334.	-334.	-334.	-334.	-261.	
	2 1505	1805	-----	-----	-2171.	-2171.	261.	261.	261.	261.	261.	261.	261.	888	
	2 1510	1810	0.047	0.010	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2 1515	1815	-----	-----	-----	-----	-167.	-167.	-167.	-167.	-167.	-167.	-167.	348.	

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
2	PART.042	PART.075	PART.075	PART.133	PART.133
	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	174.	222.	222.	24.	24.
	-----	-----	-----	-----	-----
	400.	-----	-----	24.	-----
	261.	-----	311.	-----	265.
	-----	44.	-----	120.	-----
	-1566.	-----	6172.	-----	1711.
	-----	89.	-----	0.	-----
	87.	-----	5150.	-----	2964.
	-----	-----	-----	-----	-----
	-----	444.	-----	482.	-----
	-87.	-----	4573.	-----	3519.
	-----	178.	-----	72.	-----
	87.	-----	2531.	-----	4579.
	-----	89.	-----	72.	-----
	1653.	-----	977.	-----	4579.
	-----	89.	-----	120.	-----
	174.	-----	1154.	-----	3856.
	-----	400.	-----	554.	-----
	-----	-----	-----	-----	-----
	522.	-----	888.	-----	3567.
	-----	-----	-----	-----	-----
	-----	0.	-----	386.	-----
	87.	-----	222.	-----	121.
	-----	89.	-----	48.	-----
	-261.	-----	133.	-----	96.
	-----	311.	-----	1253.	-----
	957.	-----	89.	-----	72.
	-----	-----	-----	-----	-----
	-----	266.	-----	2940.	-----
	87.	-----	178.	-----	602.
	-----	1066.	-----	3687.	-----
	522.	-----	710.	-----	313.
	-----	710.	-----	3350.	-----
	-261.	-----	1066.	-----	2338.
	-----	888.	-----	2410.	-----
	-----	-----	-----	-----	-----
	348.	-----	1288.	-----	2820.

2

AFF-101
JP-10: VARIABLE FUEL
1981, JULY 16-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2	
		PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023						
1 605	-175	12.	12.	7.	7.	4.	4.						
1 835	-25	-74.	-----	47.	-----	4.	4.						
1 845	-15	-----	25.	-----	7.	-----	4.	4.	4.	4.	4.		
1 1005	65	37.	-----	13.	-----	42.	42.	42.	42.	42.	42.		
1 1015	75	-----	37.	-----	13.	-----	4.	4.	4.	4.	4.		
1 1105	125	12.	-----	7.	-----	4.	4.	4.	4.	4.	4.		
1 1115	135	-----	135.	-----	27.	-----	18.	18.	18.	18.	18.		
1 1205	185	-172.	-----	20.	-----	7.	7.	7.	7.	7.	7.		
1 1215	195	-----	98.	-----	-13.	-----	14.	14.	14.	14.	14.		
1 1305	245	25.	-----	-7.	-----	7.	7.	7.	7.	7.	7.		
1 1315	255	-----	37.	-----	60.	-----	14.	14.	14.	14.	14.		
1 1405	305	25.	-----	-100.	-----	28.	28.	28.	28.	28.	28.		
1 1415	315	-----	12.	-----	27.	-----	32.	32.	32.	32.	32.		
1 1505	365	246.	-----	-67.	-----	11.	11.	11.	11.	11.	11.		
1 1515	375	-----	295.	-----	-80.	-----	56.	56.	56.	56.	56.		
1 1605	425	62.	-----	7.	-----	11.	11.	11.	11.	11.	11.		
1 1615	435	-----	98.	-----	20.	-----	-35.	-35.	-35.	-35.	-35.		
2 835	1415	-25.	-----	20.	-----	7.	7.	7.	7.	7.	7.		
2 845	1425	-----	-37.	-----	133.	-----	-18.	-18.	-18.	-18.	-18.		
2 1005	1505	12.	-----	20.	-----	-39.	-39.	-39.	-39.	-39.	-39.		
2 1015	1515	-----	-25.	-----	40.	-----	18.	18.	18.	18.	18.		
2 1105	1565	61.	-----	-27.	-----	39.	39.	39.	39.	39.	39.		
2 1115	1575	-----	-49.	-----	80.	-----	-4.	-4.	-4.	-4.	-4.		
2 1205	1625	172.	-----	-47.	-----	88.	88.	88.	88.	88.	88.		
2 1215	1635	-----	148.	-----	-40.	-----	7.	7.	7.	7.	7.		
2 1305	1685	37.	-----	93.	-----	18.	18.	18.	18.	18.	18.		
2 1315	1695	-----	123.	-----	-47.	-----	-49.	-49.	-49.	-49.	-49.		
2 1405	1745	357.	-----	-13.	-----	35.	35.	35.	35.	35.	35.		
2 1415	1755	-----	86.	-----	20.	-----	7.	7.	7.	7.	7.		
2 1505	1805	74.	-----	67.	-----	7.	7.	7.	7.	7.	7.		
2 1515	1815	-----	185.	-----	7.	-----	32.	32.	32.	32.	32.		

----- NO DATA TAKEN

AFF-102
 PROPENE/NOX CONDITIONING
 1981, JULY 20

0805: START FILL, WET 5.9; DRY: 0.0
 0858: INJECTED 11.0 ML NO₂
 0900: INJECTED 12.0 ML NO
 0902: INJECTED 22.5 ML PROPENE
 0932: UNCOVERED BAG (T=0)
 0935: WEATHER: SUNNY, CLEAR, WARM
 1400: BAG COVERED; RUN OVER.

T=0 AT 920 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	38.5	7.7	DEG C
ID	INST.	INITIAL CONC.		UNITS
NO	B-NOX-1	0.240		PPM
NO ₂ -UNC	B-NOX-1	0.203		PPM

INSTRUMENTS USED

864

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143

CLOCK	ELAPSED	OZONE	NO	NO ₂ -UNC	NOX-UNC	T	CONDENS	#PART
TIME	TIME	PPM	PPM	PPM	PPM	DEG C	10E3/CC	PART/
BY HR.	(MIN)	D-1790	B-NOX-1	B-NOX-1	B-NOX-1	DORIC-1	CNC-143	CLIM
1	920	0	0.000	0.240	0.203	33.1	0.0	0
1	1355	275	0.810	0.013	0.209	44.0	0.1	246

CLOCK	ELAPSED	AER.S	PART.024	PART.042	PART.975	PART.133	PART.237	PART.
TIME	TIME	UM2/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/
BY HR.	(MIN)	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1	920	0	28.	0.	522.	-89.	-24.	-12.
1	1355	275	149.	1169.	261.	622.	1422.	25.

----- NO DATA TAKEN

NOTES

NEPHALOMETER DOES NOT WORK

12 NOV 1981
PAGE 1

2
30
8
143

C	T	CONDENS	*PART>.3	*PART>.5	*PART>1	AER.V	AER.N
	DEG C	10E3/CC	PART/CC	PART/CC	PART/CC	UM3/CC	PART/CC
1	DORIC-1	CNC-143	CLIMET	CLIMET	CLIMET	TSI-023	TG1-023
2	33.1	0.0	0.	0.	0.	4.	405.
9	44.0	0.1	246.	41.	0.	7.	3559.
075	PART.133	PART.237	PART.422	PART.750			
CC	PART/CC	PART/CC	PART/CC	PART/CC			
23	TSI-023	TSI-023	TSI-023	TSI-023			
.	-24.	-12.	-13.	21.			
.	1422.	25.	47.	14.			

2

AFF-103
JP-10 VS N-BUTANE
1981, JULY 21

0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 15.4
DRY BULB: 22.9 R.H.: 45%
0627: INJECTED 5.0 ML NO₂
0629: INJECTED 18.0 ML NO
0631: DIVIDE BAG
0642: INJECTED 125 ML N-BUTANE INTO SIDE B
0645: INJECTED 312 MICROLITERS JP10 INTO SIDE A
0900: UCVERED BAG (T=0)
0905: WEATHER: PARTIAL CLOUDS BUT CLEARING, WARM
1620: END OF RUN

T=0 AT 900 PST

BAG NO. 22 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	36.5	6.3	DEG C	SIDE 1
T	DORIC-1	36.7	6.2	DEG C	SIDE 2
UV RAD	EPPLLEY-2	2.50	0.78	MW/CM ²	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.389	PPM	SIDE 1
NO	B-NOX-1	0.390	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.125	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.131	PPM	SIDE 2
N-C4	VA1400-7	5.7750	PPM	SIDE 2
JP-10	VAR 3700	2.2740	PPM	SIDE 1

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-I AB; 12% CARBOWAX-600 GC; ECD
4131	EPPLLEY-2	EPPLLEY 14290 UV RADIOMETER; UNDER BAG
2100	PN-1	RM-121 POROPAK-N GC; FID
1400	VA1400-7	RM-121; C20-M/DC-703 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-103

JP-10 VS N-BUTANE

1981, JULY 21

	CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX- PPM B-NOX-1
1	600	-180	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1	715	-105	-----	-----	-----	-----	-----	-----	-----
1	740	-80	-----	-----	-----	-----	-----	-----	-----
1	810	-50	-----	-----	-----	-----	-----	-----	-----
1	835	-25	0.000	-----	0.389	-----	0.125	-----	0.5
1	845	-15	-----	0.000	-----	0.390	-----	0.131	-----
1	1005	65	0.001	-----	0.329	-----	0.168	-----	0.5
1	1015	75	-----	0.002	-----	0.250	-----	0.249	-----
1	1105	125	0.003	-----	0.278	-----	0.206	-----	0.4
1	1115	135	-----	0.015	-----	0.140	-----	0.350	-----
1	1205	185	0.005	-----	0.220	-----	0.255	-----	0.4
1	1215	195	-----	0.053	-----	0.050	-----	0.465	-----
1	1305	245	0.010	-----	0.165	-----	0.322	-----	0.4
1	1315	255	-----	0.135	-----	0.015	-----	0.470	-----
1	1405	305	0.028	-----	0.110	-----	0.342	-----	0.4
1	1415	315	-----	0.252	-----	0.000	-----	0.482	-----
1	1505	365	0.028	-----	0.070	-----	0.402	-----	0.4
1	1515	375	-----	0.351	-----	0.000	-----	0.456	-----
1	1605	425	0.038	-----	0.045	-----	0.419	-----	0.4
1	1615	435	-----	0.418	-----	0.000	-----	0.431	-----

----- NO DATA TAKEN

500

12 NOV 1981

PAGE 2

	SIDE 1 NO2-UNC PPM X-1 B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 2 N-C4 PPM VA1400-7	SIDE 2 N-C4 PPM DMS-1	SIDE 1 JP-10 PPM VAR 3700
000	0.000	0.000	0.000	0.000	-----	-----	-----
--	-----	-----	-----	-----	-----	-----	2.183
--	-----	-----	-----	-----	-----	6.512	-----
--	-----	-----	-----	-----	5.827	-----	-----
390	0.125	-----	0.500	-----	-----	-----	2.450
--	-----	0.131	-----	0.498	5.775	-----	-----
250	0.168	-----	0.500	-----	-----	-----	2.414
--	-----	0.249	-----	0.498	5.713	-----	-----
140	0.206	-----	0.491	-----	-----	-----	2.454
--	-----	0.350	-----	0.492	5.671	-----	-----
050	0.255	-----	0.439	-----	-----	-----	2.335
--	-----	0.465	-----	0.400	5.609	-----	-----
015	0.322	-----	0.491	-----	-----	-----	-----
--	-----	0.470	-----	0.480	5.537	-----	-----
000	0.342	-----	0.479	-----	-----	-----	2.176
--	-----	0.482	-----	0.493	5.474	-----	-----
000	0.402	-----	0.485	-----	-----	-----	2.453
--	-----	0.456	-----	0.462	5.412	-----	-----
000	0.419	-----	0.473	-----	-----	-----	2.286
--	-----	0.431	-----	0.438	5.391	6.076	-----

2

AFF-103
JP-10 VS N-BUTANE
1981, JULY 21

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2	SIDE 1	SIDE 2	SIDE 1	SIDE 1
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC EPPLEY-2	CONDENS 10E3/CC CNC-143	PART/CC CLIMET	#PART/CC PART/CC CLI
1 600	-180	22.4	22.4	-----	0.0	0.0	0.	0.
1 835	-25	31.8	-----	-----	0.1	-----	0.	---
1 845	-15	-----	32.1	-----	-----	0.1	-----	0.
1 1005	65	33.6	-----	2.05	0.2	-----	42.	---
1 1015	75	-----	35.1	2.41	-----	0.2	-----	0.
1 1105	125	37.7	-----	3.23	0.2	-----	45.	---
1 1115	135	-----	38.4	3.19	-----	0.1	-----	0.
1 1205	185	40.6	-----	3.09	0.1	-----	38.	---
1 1215	195	-----	41.5	3.23	-----	0.0	-----	0.
1 1305	245	39.7	-----	3.00	0.1	-----	33.	---
1 1315	255	-----	40.5	3.00	-----	0.0	-----	0.
1 1405	305	42.3	-----	2.59	0.1	-----	42.	---
1 1415	315	-----	40.3	3.37	-----	0.0	-----	0.
1 1505	365	41.4	-----	1.73	0.2	-----	52.	---
1 1515	375	-----	41.2	1.64	-----	0.1	-----	0.
1 1605	425	38.6	-----	1.32	0.1	-----	54.	---
1 1615	435	-----	38.8	1.18	-----	0.0	-----	0.

----- NO DATA TAKEN

501

12 NOV 1981
PAGE 3

1	SIDE 2 CONDENS 10E3/CC 43	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0	0.0	0.	0.	0.	0.	0.	0.
1	-----	0.	-----	0.	-----	0.	-----
--	0.1	-----	0.	-----	0.	-----	0.
2	-----	42.	-----	0.	-----	0.	-----
--	0.2	-----	0.	-----	0.	-----	0.
2	-----	45.	-----	13.	-----	0.	-----
--	0.1	-----	0.	-----	0.	-----	0.
1	-----	38.	-----	36.	-----	0.	-----
--	0.0	-----	0.	-----	0.	-----	0.
1	-----	33.	-----	29.	-----	0.	-----
--	0.0	-----	0.	-----	0.	-----	0.
1	-----	42.	-----	27.	-----	4.	-----
--	0.0	-----	0.	-----	0.	-----	0.
2	-----	52.	-----	35.	-----	13.	-----
--	0.1	-----	0.	-----	0.	-----	0.
1	-----	54.	-----	38.	-----	9.	-----
--	0.0	-----	0.	-----	0.	-----	0.

2

AFF-103

JP-10 VS N-BUTANE
1981, JULY 21

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT MRI-388	SIDE 2 BSCAT MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER. UM2/ TSI-C
1 600	-180	0.1	0.1	-12.	-12.	-1073.	-1073.	-83
1 835	-25	0.0	----	2.	----	997.	----	20
1 845	-15	----	0.0	----	0.	----	-424.	----
1 1005	65	0.3	----	4.	----	119.	----	53
1 1015	75	----	0.1	----	3.	----	46.	----
1 1105	125	0.8	----	5.	----	327.	----	46
1 1115	135	----	0.2	----	1.	----	-200.	----
1 1205	185	0.9	----	2.	----	-325.	----	17
1 1215	195	----	0.2	----	-2.	----	-233.	----
1 1305	245	0.8	----	2.	----	137.	----	28
1 1315	255	----	0.0	----	6.	----	-82.	----
1 1405	305	1.0	----	3.	----	605.	----	42
1 1415	315	----	0.2	----	7.	----	1758.	----
1 1505	365	1.2	----	6.	----	-225.	----	58
1 1515	375	----	0.2	----	1.	----	-240.	----
1 1605	425	1.2	----	-2.	----	475.	----	-10
1 1615	435	----	0.1	----	3.	----	-110.	----

----- NO DATA TAKEN

502

12 NOV 1981
PAGE 4

DE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
R.V	AER.N	AER.N	AER.S	AER.S	PAN	PAN
3/CC	PART/CC	PART/CC	UM2/CC	UM2/CC	PPM	PPM
-023	TSI-023	TSI-023	TSI-023	TSI-023	ECD-3	ECD-3
12.	-1073.	-1073.	-63.	-83.	----- A	----- A
	997.	-----	20.	-----	-----	-----
-0.	-----	-424.	-----	7.	-----	-----
	119.	-----	53.	-----	-----	-----
3.	-----	46.	-----	29.	-----	-----
	327.	-----	46.	-----	0.001	-----
-1.	-----	-200.	-----	-2.	-----	0.010
	-325.	-----	17.	-----	0.001	-----
-2.	-----	-233.	-----	-13.	-----	0.014
	137.	-----	28.	-----	0.000	-----
6.	-----	-82.	-----	46.	-----	0.018
	605.	-----	42.	-----	-----	-----
7.	-----	1758.	-----	32.	-----	0.022
	-225.	-----	58.	-----	0.001	-----
1.	-----	-240.	-----	18.	-----	0.029
	475.	-----	-10.	-----	-----	-----
3.	-----	-110.	-----	19.	-----	0.035

2

AFF-103
JP-10 VS N-BUTANE
1981, JULY 21

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART. PART. TSI-
1 600	-180	-----	-----	-668.	-668.	261.	261.	-142.
1 810	-50	0.029	0.063	-----	-----	-----	-----	-----
1 835	-25	-----	-----	1002.	-----	-174.	-----	13.
1 845	-15	-----	-----	-----	-668.	-----	174.	-----
1 1005	65	-----	-----	-501.	-----	348.	-----	8.
1 1015	75	-----	-----	-----	501.	-----	-696.	-----
1 1105	125	-----	-----	334.	-----	-174.	-----	-4.
1 1115	135	-----	-----	-----	-167.	-----	-87.	-----
1 1200	180	0.036	0.029	-----	-----	-----	-----	-----
1 1205	185	-----	-----	334.	-----	-609.	-----	-4.
1 1215	195	-----	-----	-----	-167.	-----	87.	-----
1 1305	245	-----	-----	167.	-----	-87.	-----	-17.
1 1315	255	-----	-----	-----	334.	-----	-435.	-----
1 1405	305	-----	-----	-167.	-----	435.	-----	22.
1 1415	315	-----	-----	-----	5010.	-----	-5481.	-----
1 1505	365	-----	-----	-668.	-----	87.	-----	4.
1 1515	375	-----	-----	-----	-167.	-----	-261.	-----
1 1605	425	-----	-----	334.	-----	-174.	-----	31.
1 1610	430	0.010	0.025	-----	-----	-----	-----	-----
1 1615	435	-----	-----	-----	167.	-----	-435.	-----

----- NO DATA TAKEN

503

IDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
.024	PART.042	PART.042	PART.075	PART.075	PART.133	PART.133
/CC	PART/CC	PART/CC	FART/CC	PART/CC	PART/CC	PART/CC
-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
68.	261.	261.	-1421.	-1421.	506.	506.
-----	-----	-----	-----	-----	-----	-----
-----	-174.	-----	133.	-----	24.	-----
68.	-----	174.	-----	178.	-----	-96.
-----	348.	-----	89.	-----	72.	-----
01.	-----	-696.	-----	133.	-----	96.
-----	-174.	-----	-44.	-----	193.	-----
67.	-----	-87.	-----	89.	-----	-96.
-----	-----	-----	-----	-----	-----	-----
-----	-609.	-----	-44.	-----	-48.	-----
67.	-----	87.	-----	-133.	-----	-24.
-----	-87.	-----	-178.	-----	169.	-----
34.	-----	-435.	-----	-89.	-----	145.
-----	435.	-----	222.	-----	72.	-----
10.	-----	-5481.	-----	3197.	-----	-940.
-----	87.	-----	44.	-----	289.	-----
67.	-----	-261.	-----	-44.	-----	217.
-----	-174.	-----	311.	-----	-48.	-----
-----	-----	-----	-----	-----	-----	-----
67.	-----	-435.	-----	178.	-----	24.

2

AFF-103
JP-10 VS N-BUTANE
1981, JULY 21

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART 422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 600	-180	467.	467.	-180.	-180.	-39.	-39.
1 835	-25	-12.	-----	20.	-----	4.	-----
1 845	-15	-----	-74.	-----	73.	-----	-11.
1 1005	65	74.	-----	27.	-----	11.	-----
1 1015	75	-----	-12.	-----	13.	-----	11.
1 1105	125	-12.	-----	13.	-----	18.	-----
1 1115	135	-----	62.	-----	7.	-----	-7.
1 1205	185	12.	-----	27.	-----	4.	-----
1 1215	195	-----	-25.	-----	47.	-----	-18.
1 1305	245	49.	-----	13.	-----	4.	-----
1 1315	255	-----	-61.	-----	-7.	-----	32.
1 1405	305	12.	-----	20.	-----	11.	-----
1 1415	315	-----	-37.	-----	-33.	-----	42.
1 1505	365	25.	-----	-33.	-----	32.	-----
1 1515	375	-----	12.	-----	0.	-----	4.
1 1605	425	86.	-----	-27.	-----	-7.	-----
1 1615	435	-----	-74.	-----	20.	-----	11.

----- NO DATA TAKEN

NOTES

A PANALYZER NOT WORKING PROPERLY UNTIL 1105 READING
BECKMANN WAS NOT WORKING

504

AFF-104
NOX AIR IRRADIATION
1981, JULY 22

0840: START FILL. WET 6.0; DRY 0.0
1020: INJECTED 5 ML NO₂
1022: INJECTED 16 ML NO
1024: INJECTED .4 ML PROPANE AND .4 ML PROPENE
1100: UNCOVER BAG (T=0)
1105: WEATHER: SUNNY, HOT, LIGHT BREEZE
1300: RUN OVER
1330: COVERED BAG

NOTE: TEMPERATURE DATA UNREASONABLE AND SHOULD NOT BE USED.

RESULTS:

CALC. AVG. OH = 30.8 * D LN(PROPANE/PROPENE)/DT = 0.020(+0.004) PPT
CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂) = 0.037 PPB/MIN
NO OXIDATION RATE NEGIGIBLE

T=0 AT 1100 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
UV RAD	EPPLEY-2	3.68	0.18	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.358	PPM
NO ₂ -UNC	B-NOX-1	0.108	PPM
PROPANE	DMS-1	0.0136	PPM
PROPENE	DMS-1	0.0094	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
3000	CA	CHROMOTROFIC ACID HCHO ANALYSIS
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

505

AFF-104
 NOX AIR IRRADIATION
 1981, JULY 22

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	T DEG DORIC
1 1045	-15	0.000	0.345	0.102	0.451	0.0136	0.0094	34.
1 1055	-5	-----	-----	-----	-----	-----	-----	-----
1 1100	0	0.000	0.358	0.108	0.474	0.0150	0.0108	37.
1 1115	15	0.000	0.361	0.111	0.485	0.0146	0.0100	45.
1 1130	30	0.001	0.369	0.118	0.483	0.0152	0.0105	49.
1 1145	45	0.002	0.395	0.120	0.499	0.0146	0.0100	51.
1 1200	60	0.001	0.389	0.125	0.490	0.0144	0.0098	49.
1 1215	75	0.000	0.341	0.107	0.456	0.0145	0.0097	52.
1 1230	90	0.001	0.332	0.105	0.446	0.0151	0.0099	53.
1 1245	105	0.002	0.360	0.110	0.480	0.0134	0.0090	54.
1 1250	110	-----	-----	-----	-----	-----	-----	-----
1 1300	120	0.000	0.360	0.119	0.480	0.0149	0.0097	54.

CLOCK ELAPSED ACETALD
 TIME TIME PPM
 DY HR. (MIN) 10'C-600

1 1045 -15 0.0091
 1 1300 120 0.0118

----- NO DATA TAKEN

NOTES

A TEMPERATURE MEASUREMENTS UNREASONABLY HIGH. PROBABLE THAT WRONG PROBE WAS USED.

506

12 NOV 1981

PAGE 2

C	PROPANE PPM DMS-1	PROPENE PPM DMS-1	T DEG C DURIC-1	UV RAD MW/CM ² EPPLEY-2	LNC3/C3=	PAN PPM ECD-3	HCHO PPM CA	
51	0.0136	0.0094	34.7	A	-----	0.3717	0.000	-----
-----	-----	-----	-----	-----	-----	-----	-----	0.013
74	0.0150	0.0106	37.6	3.87	0.3280	0.000	-----	-----
85	0.0146	0.0100	45.8	3.73	0.3769	-----	-----	-----
83	0.0152	0.0105	49.6	3.82	0.3689	-----	-----	-----
79	0.0146	0.0100	51.3	3.64	0.3764	-----	-----	-----
20	0.0144	0.0098	49.9	3.87	0.3866	-----	-----	-----
66	0.0145	0.0097	52.4	3.82	0.3960	-----	-----	-----
46	0.0151	0.0099	53.8	3.59	0.4236	-----	-----	-----
80	0.0134	0.0090	54.7	3.46	0.3972	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----	0.090
80	0.0149	0.0097	54.9	3.37	0.4294	0.000	-----	-----

PROBABLE THAT WRONG PROBE WAS USED.

2

AFF-105
PROPENE-NOX CONDITIONING
1981, JULY 23

0705: START FILL, WET: 6.1; DRY: 0.0; WET BULB TEMP: 17.0C; DRY BULB TEMP: 27.
RH=33%
0834: INJECTED 11.0 ML NO2
0836: INJECTED 12.0 ML NO
0838: INJECTED 22.5 ML PROPENE
0930: UNCOVERED BAG (T=0)
0935: WEATHER: SUNNY, WARM, SLIGHT BREEZE.
1430: RUN OVER.

T=0 AT 930 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	36.2	6.0	DEG C
UV RAD	EPPLEY-2	3.28	0.57	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.218	PPM
NO2-UNC	B-NOX-1	0.200	PPM

INSTRUMENTS USED

705

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1600	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPENE PPM DMS-1	T DEG C DORIC-1	UV MW/ EPPLEY
1 845	-45	0.000	0.219	0.196	0.432	0.5329	27.4	---
1 930	0	0.005	0.218	0.200	0.429	-----	28.6	2.0
1 1030	60	0.015	0.121	0.278	0.412	-----	35.3	3.0
1 1130	120	0.103	0.025	0.354	0.378	-----	39.2	3.0
1 1230	180	0.345	0.010	0.306	0.315	-----	40.3	3.0
1 1300	210	0.567	0.008	0.248	0.259	-----	41.2	3.0
1 1430	300	0.710	0.008	0.213	0.220	0.0079	41.6	2.0

----- NO DATA TAKEN

12 NOV 1981
PAGE 1

; 17.0CF DRY BULB TEMP: 27.

	PROPENE PPM DMS-1	T DEG C DORIC-1	UV RAD MW/CM ² EPPLEY-2	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1
0	0.5329	27.4	-----	1.73	0.0046	0.0071
1	-----	28.6	2.63	-----	-----	-----
2	-----	35.3	3.64	-----	-----	-----
3	-----	39.2	3.82	-----	-----	-----
4	-----	40.3	3.78	-----	-----	-----
5	-----	41.2	3.28	-----	-----	-----
6	0.0079	41.6	2.54	1.69	0.0026	0.0063

AFF-105
PROPENE-NOX CONDITIONING
1981, JULY 23

CLOCK TIME DY	ELAPSED TIME (MIN)	ACETYLEN PPM PN-1	ACETYLEN PPM DMS-1	PROPANE PPM DMS-1	I-C4 PPM DMS-1	N-C4 PPM DMS-1	1-C4= PPM DMS-1	I-C4= PPM DMS-1
1 845	-45	0.0027	0.0029	0.0071	-----	0.0018	0.0002	0.000
1 930	0	-----	-----	-----	-----	-----	-----	-----
1 1010	40	-----	-----	-----	-----	-----	-----	-----
1 1430	300	0.0019	0.0021	0.0063	0.0011	0.0010	-----	0.000
1 1450	320	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

N-C4 PPM DMS-1	I-C4= PPM DMS-1	I-C5 PPM DMS-1	N-C5 PPM DMS-1	PAN PPM ECD-3	HCHO PPM CA
0.0018	0.0002	0.0002	0.0010	0.0006	0.000
-----	-----	-----	-----	0.000	-----
-----	-----	-----	-----	-----	0.025
0.0010	-----	0.0001	-----	-----	-----
-----	-----	-----	-----	-----	0.176

2

AFF-106
OZONE DECAY
1981 JULY 24

DAY 1 (JULY 24)

0615: START FILL. WET: 6.0 DRY: 0.0
0800: STOP FILL.(STOPPER WAS OUT--CAUSED LONGER FILLING TIME)
0750: INJECTED 10.5 LITERS OZONE.

0836: MIX BAG.

DAY 2 (JULY 25)

BAG LOOKS GREAT! NO NOTICEABLE AIR LOSS.

DAY 4 (JULY 27)

30740: BAG~75-80% FULL.
END RUN.

RESULTS: OZONE DECAY RATE (%/HR)

DAY 1-DAY 2 0.27
DAY 2-DAY 4 0.26

T=0 AT 0 PST

K1 = 0.450 MIN-1

INSTRUMENTS USED

ID LABEL DESCRIPTION
1790 D-1790 DASIBI 1790 OZONE MONITOR

605 CLOCK ELAPSED OZONE
TIME TIME PPM
DY HR. (MIN) D-1790

1 1500 0 3.896

2 1120 1220 3.685

4 740 3880 3.278

----- NO DATA TAKEN

AFF-107

NOX-AIR IRRADIATION

1981 JULY 27

0920: START FILL. WET: 6.0, DRY: 0.0 WE1 BULB: 19.6,
DRY BULB: 32.0 R.H.=31% DEW PT.=12.2
1022: INJECTED 5.0 ML. NO₂.
1024: INJECTED 18.0 ML. NO.
1026: INJECTED 0.46 ML. PROPENE AND 0.46 ML. PROPANE.
1035: END FILL.
1040: MIX BAG.
1100: UNCOVER BAG (T=0).
1105: WEATHER: SUNNY AND HOT.
1300: RUN OVER, BAG DUMPED.

RESULTS:

CALC. AVG. OH = 30.8 * D LN(PROPANE/PROPENE)/DT = 0.032 PPT

CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂) = 0.041 PPB/MIN
-D(NO)/DT = 0.06 PPB/MIN

T=0 AT 1100 PST

K₁ = 0.450 MIN⁻¹

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	33.5	3.0	DEG C
UV RAD	EPPLEY-2	3.14	0.24	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.307	PPM
NO ₂ -UNC	B-NOX-1	0.081	PPM
PROPANE	DMS-1	0.0149	PPM
PROPENE	DMS-1	0.0109	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD

510

AFF-107
NOX-AIR IRRADIATION
1981 JULY 27

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC
1 1045	-15	-----	-----	-----	-----	0.0149	0.0109	0.
1 1055	-5	0.000	0.307	0.081	0.391	-----	-----	-----
1 1058	-2	-----	-----	-----	-----	-----	-----	-----
1 1100	0	-----	-----	-----	-----	0.0144	0.0103	0.
1 1115	15	0.002	0.309	0.082	0.389	0.0120	0.0083	0.
1 1130	30	0.002	0.308	0.081	0.388	0.0139	0.0098	0.
1 1145	45	0.002	0.302	0.085	0.387	0.0137	0.0090	0.
1 1200	60	0.003	0.303	0.083	0.387	0.0130	0.0089	0.
1 1215	75	0.002	0.301	0.081	0.383	0.0102	0.0072	0.
1 1230	90	0.002	0.302	0.080	0.383	0.0124	0.0078	0.
1 1245	105	0.002	0.302	0.080	0.382	0.0131	0.0083	0.
1 1250	110	-----	-----	-----	-----	-----	-----	-----
1 1300	120	0.003	0.303	0.081	0.383	0.0138	0.0087	0.

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	ACETALD PPM 10'C-600
-------------------------	--------------------------	----------------------------

1 1045	-15	0.0076
1 1300	120	0.0101

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

UNC M X-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	PAN PPM ECD-3	HCHO PPM CA
---	0.0149	0.0109	0.4720	-----	-----	-----	-----
391	-----	-----	-----	28.5	-----	0.003	-----
---	-----	-----	-----	-----	-----	-----	0.015
---	0.0144	0.0103	0.4950	-----	-----	-----	-----
389	0.0120	0.0083	0.5190	30.2	3.09	-----	-----
388	0.0139	0.0098	0.5100	31.6	3.23	-----	-----
387	0.0137	0.0090	0.5740	32.7	3.28	-----	-----
387	0.0130	0.0089	0.5380	33.7	3.00	-----	-----
383	0.0102	0.0072	0.5140	34.6	2.82	-----	-----
383	0.0124	0.0078	0.6160	36.8	2.86	-----	-----
382	0.0131	0.0083	0.6100	36.6	3.46	-----	-----
---	-----	-----	-----	-----	-----	-----	0.010
383	0.0138	0.0087	0.6210	36.5	3.41	0.003	-----

2

AFF-108

RJ5, 4-DAY STATIC
1981 JULY 28

DAY 1 (JULY 28)

0545: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 15.5
DRY BULB: 21.5 DEW PT.: 11.1 R.H.= 54%
0708: END FILL.
0725: INJECTED 6.2 ML. NO2.
0727: INJECTED 20.0 ML. NO.
0729: INJECTED 400 ML. FREON 12.
0736: INJECTED 915 MICROLITERS RJ-5 AT 250 DEGREES C FOR 30 MIN.
0812: MIX BAG.
0900: UNCOVERED BAG. (T=0)
0905: WEATHER: SUNNY AND WARM.

DAY 2 (JULY 29)

0810: BAG HAS LIGHT COATING OF DEW, BUT IS BURNING OFF.
0811: WEATHER: SUNNY AND CLEAR.

DAY 3 (JULY 30)

0810: WEATHER: SUNNY AND WARM.

DAY 4 (JULY 31)

0827: INJECTED 20.0 ML. NO AT 200 ML/MIN. N2 FOR 10 MIN.
0837: INJECTED 6.2 ML. NO2 AT 200 ML/MIN. N2 FOR 10 MIN.
NOTE: BOTH INJECTIONS WERE DONE WHILE FILLING THE
BAG WITH PURE AIR. PURE AIR FILLED FROM 0827
TO 0847. DILUTION FACTOR = 0.78

0850: MIX BAG.

1510: END RUN, BAG DUMPED.

RESULTS	DAY 1	DAY 2	DAY 3	DAY 4
AVG.T(DEG.C)	36(+4)	33(+5)	32(+7)	32(+7)
AVG.UV(MW/CM2)	2.6(+0.8)	2.5(+0.9)	2.8(+1.1)	2.6(+0.9)

T=0 AT 900 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	32.3	6.3	DEG C
UV RAD	EFPLEY-2	2.56	0.90	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.353	PPM
NO2-UNC	B-NOX-1	0.121	PPM
THC	BK6800-1	23.70	PPMC

512

AFF-108
RJ5, 4-DAY STATIC
1981 JULY 28

INSTRUMENTS USED		SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	RK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPELEY-2	EPPELEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-108
RJ5, 4-DAY STATIC
1981 JULY 28

CLOCK	ELAPSED	OZONE	NO	NO2-UNC	NOX-UNC	THC	T	UV
	TIME	PPM	PPM	PPM	PPM	PPMC	DEG C	MW/
DY	HR.	(MIN)	D-1790	B-NOX-1	B-NOX-1	BK6800-1	DORIC-1	EPPL
1	705	-115	0.001	0.009	0.001	0.010	-----	19.2
1	835	-25	0.003	0.353	0.121	0.490	23.70	22.6
1	1005	65	0.009	0.292	0.159	0.465	-----	28.7
1	1105	125	0.010	0.254	0.172	0.447	15.40	33.4
1	1205	185	0.012	0.215	0.201	0.432	20.30	35.7
1	1305	245	0.015	0.171	0.225	0.410	19.80	38.4
1	1405	305	0.018	0.129	0.255	0.395	20.40	39.0
1	1505	365	0.022	0.090	0.279	0.376	21.20	39.0
1	1605	425	0.026	0.062	0.288	0.360	21.00	35.1
2	805	1385	0.053	0.038	0.272	0.314	-----	22.5
2	905	1445	0.071	0.033	0.260	0.298	20.60	27.7
2	1005	1505	0.092	0.028	0.248	0.280	-----	31.2
2	1105	1565	0.134	0.020	0.232	0.250	-----	33.5
2	1205	1625	0.205	0.015	0.193	0.205	-----	35.7
2	1305	1685	0.328	0.012	0.115	0.124	-----	37.9
2	1405	1745	0.407	0.011	0.043	0.050	-----	38.2
2	1505	1805	0.397	0.011	0.020	0.028	15.80	34.5
2	1605	1865	0.376	0.011	0.019	0.025	17.50	33.9
3	805	2825	0.298	0.012	0.011	0.021	17.70	19.8
3	905	2885	0.291	0.015	0.013	0.023	17.60	23.0
3	1005	2945	0.279	0.011	0.011	0.022	18.00	27.1
3	1105	3005	0.268	0.011	0.013	0.022	17.40	32.1
3	1205	3065	0.255	0.013	0.017	0.029	17.80	35.3
3	1305	3125	0.244	0.019	0.020	0.029	17.90	37.4
3	1405	3185	0.236	0.019	0.015	0.029	17.80	38.3
3	1505	3245	0.224	0.019	0.018	0.029	17.20	38.0
3	1605	3305	0.215	0.019	0.011	0.029	15.40	34.0
4	805	4265	0.156	0.019	0.010	0.024	14.90	19.9
4	905	4325	0.017	0.162	0.278	0.460	12.10	24.3
4	1005	4385	0.018	0.141	0.285	0.449	11.80	28.3
4	1105	4445	0.023	0.120	0.301	0.439	11.40	32.4
4	1205	4505	0.033	0.091	0.319	0.422	11.90	35.6
4	1305	4565	0.045	0.061	0.323	0.400	11.70	37.6
4	1405	4625	0.063	0.041	0.339	0.379	11.10	38.6
4	1505	4685	0.086	0.030	0.325	0.354	11.00	36.9

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

UNC M X-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET
010	-----	19.2	-----	0.0	2.	0.	0.
490	23.70	22.6	-----	14.9	0.	0.	0.
465	-----	28.7	2.23	20.5	1.	0.	0.
447	19.40	33.4	2.68	14.5	16.	0.	0.
432	20.30	35.7	2.73	10.5	123.	1.	0.
410	19.80	38.4	3.69	8.3	273.	31.	0.
395	20.40	39.0	2.73	6.2	363.	111.	1.
376	21.20	39.0	1.91	4.4	403.	189.	9.
360	21.00	35.1	1.18	3.2	419.	233.	22.
314	-----	22.5	1.28	0.5	169.	124.	5.
298	20.60	27.7	2.18	0.3	273.	126.	8.
280	-----	31.2	2.27	0.4	330.	163.	16.
250	-----	33.5	3.55	0.5	338.	255.	31.
205	-----	35.7	3.28	0.6	349.	292.	53.
124	-----	37.9	3.55	4.2	420.	313.	89.
050	-----	38.2	2.86	5.8	479.	362.	126.
028	15.80	36.5	2.00	4.4	481.	364.	124.
025	17.50	33.9	1.32	3.5	472.	344.	102.
021	17.70	19.8	1.32	4.9	99.	34.	0.
023	17.60	23.0	2.36	5.1	79.	34.	0.
022	18.00	27.1	2.45	3.7	84.	34.	0.
022	17.40	32.1	4.05	3.0	81.	42.	0.
029	17.80	35.3	4.45	2.8	320.	91.	2.
029	17.90	37.4	3.59	2.3	359.	137.	5.
029	17.80	38.3	3.00	1.9	369.	154.	7.
029	17.20	38.0	2.27	1.6	362.	148.	6.
029	15.40	34.0	1.28	1.4	367.	134.	5.
024	14.90	19.9	0.95	3.3	21.	8.	0.
460	12.10	24.3	2.23	3.3	13.	6.	0.
449	11.80	28.3	2.32	2.7	150.	10.	0.
439	11.40	32.4	3.59	2.1	312.	76.	1.
422	11.90	35.6	2.91	1.8	381.	167.	8.
400	11.70	37.6	3.73	1.3	408.	206.	17.
379	11.10	38.6	2.68	1.0	418.	239.	27.
354	11.00	36.9	2.00	0.8	469.	266.	39.

2

AFF-108
 RJ5. 4-DAY STATIC
 1981 JULY 28

CLOCK	ELAPSED	BSCAT	AER.V	AER.N	AER.S	I-C5	RJ-5(A)	RJ-5(I)
TIME	TIME	10-4 M-1	UM3/CC	PART/CC	UM2/CC	PPM	PPMC	PPMC
BY HR.	(MIN)	MRI-388	TSI-023	TSI-023	TSI-023	DMS-1	VAR 3700	VAR 37
1	705	-115	0.0	1.	910.	13.	0.0001	-----
1	820	-40	-----	-----	-----	-----	1.110	1.46
1	830	-30	-----	-----	-----	-----	-----	-----
1	835	-25	0.1	11.	9943.	169.	-----	-----
1	1005	65	4.1	27.	6.0E 04	1170.	-----	1.227
1	1105	125	6.8	29.	4.7E 04	1290.	-----	1.259
1	1200	180	-----	-----	-----	-----	-----	-----
1	1205	185	11.5	27.	4.1E 04	1187.	-----	1.5
1	1305	245	16.0	26.	3.4E 04	1115.	-----	-----
1	1405	305	22.0	30.	2.9E 04	1097.	-----	1.129
1	1505	365	26.5	24.	2.2E 04	981.	-----	1.048
1	1600	420	-----	-----	-----	-----	-----	-----
1	1605	425	29.0	21.	2.6E 04	839.	0.0002	1.184
2	715	1335	-----	-----	-----	0.0001	-----	-----
2	805	1385	3.6	3.	3831.	88.	-----	1.421
2	905	1445	5.8	4.	4372.	127.	-----	1.637
2	1005	1505	7.5	8.	4293.	181.	-----	0.853
2	1105	1565	8.2	5.	2730.	118.	-----	1.326
2	1200	1620	-----	-----	-----	-----	-----	-----
2	1205	1625	9.7	6.	3570.	166.	-----	-----
2	1305	1685	22.5	18.	1.5E 04	599.	-----	-----
2	1405	1745	45.0	43.	2.8E 04	1339.	-----	1.213
2	1505	1805	49.0	43.	2.8E 04	1297.	-----	1.302
2	1600	1860	-----	-----	-----	-----	-----	-----
2	1605	1865	42.0	32.	1.8E 04	1064.	-----	0.886
2	1615	1875	-----	-----	-----	0.0001	-----	-----
3	715	2775	-----	-----	-----	0.0001	-----	-----
3	730	2790	-----	-----	-----	0.0001	-----	-----
3	805	2825	1.3	8.	1.2E 04	175.	-----	1.457
3	905	2885	2.1	9.	1.5E 04	347.	-----	1.407
3	1005	2945	4.7	14.	1.4E 04	462.	-----	1.207
3	1105	3005	8.2	13.	1.2E 04	470.	-----	1.5
3	1200	3060	-----	-----	-----	-----	-----	-----
3	1205	3065	13.5	14.	1.2E 04	491.	-----	0.901
3	1305	3125	14.5	13.	8743.	425.	-----	1.468
3	1405	3185	15.0	13.	8298.	412.	-----	1.242
3	1505	3245	14.0	10.	7385.	355.	-----	1.316
3	1600	3300	-----	-----	-----	-----	-----	-----
3	1605	3305	11.0	9.	6821.	323.	-----	1.443
4	735	4235	-----	-----	-----	-----	-----	-----
4	805	4265	0.2	7.	9286.	145.	-----	1.243
4	900	4320	-----	-----	-----	-----	-----	-----
4	905	4325	1.8	13.	1.3E 04	325.	-----	0.988
4	930	4350	-----	-----	-----	-----	-----	-----
4	1005	4385	6.2	12.	1.1E 04	408.	-----	1.258
4	1105	4445	12.5	18.	9969.	507.	-----	0.726
4	1200	4500	-----	-----	-----	-----	-----	-----
4	1205	4505	17.0	17.	8842.	500.	-----	-----
4	1305	4565	20.5	17.	8177.	471.	-----	0.968
4	1405	4625	21.0	15.	7933.	434.	-----	1.099

----- NO DATA TAKEN

515

12 NOV 1981
PAGE 4

I-C5 PPM MS-1	RJ-5(A) PPMC VAR 3700	RJ-5(B) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	FREON 12 RAW DATA DMS-1	PAN PPM ECD-3	HCHO PPM CA
.0001	-----	-----	-----	-----	0.000	-----
	1.110	1.468	5.946	338.9	-----	-----
	-----	-----	-----	-----	-----	0.021
	-----	-----	-----	-----	0.000	-----
	1.227	1.665	6.811	-----	0.001	-----
	1.259	1.624	6.097	-----	0.002	-----
	-----	-----	-----	-----	-----	0.006
	-----	1.514	5.854	-----	0.003	-----
	-----	-----	-----	-----	0.003	-----
	1.129	1.506	5.380	-----	0.003	-----
	1.048	1.914	7.380	-----	0.003	-----
	-----	-----	-----	-----	-----	0.048
.0002	1.184	1.538	5.539	357.9	0.004	-----
.0001	-----	-----	-----	368.6	-----	-----
	1.421	1.807	7.140	-----	0.000	0.021
	1.637	1.931	7.690	-----	0.001	-----
	0.853	1.570	5.948	-----	0.002	-----
	1.326	1.529	5.256	-----	0.003	-----
	-----	-----	-----	-----	-----	0.008
	-----	-----	-----	-----	0.003	-----
	-----	-----	-----	-----	0.005	-----
	1.213	1.642	4.646	-----	0.004	-----
	1.302	1.496	4.844	-----	0.004	-----
	-----	-----	-----	-----	-----	0.067
	0.886	1.166	3.431	-----	0.004	-----
.0001	-----	-----	-----	283.6	-----	-----
.0001	-----	-----	-----	367.6	-----	-----
.0001	-----	-----	-----	357.4	-----	-----
	1.457	1.840	5.693	-----	0.000	0.050
	1.407	1.622	5.487	-----	0.001	-----
	1.207	1.556	5.018	-----	0.002	-----
	-----	1.542	5.382	-----	0.002	-----
	-----	-----	-----	-----	-----	0.044
	0.901	1.632	5.243	-----	0.003	-----
	1.468	1.641	5.268	-----	0.002	-----
	1.242	1.601	4.971	-----	0.001	-----
	1.316	1.719	5.476	-----	0.003	-----
	-----	-----	-----	-----	-----	0.029
	1.443	1.609	4.953	238.6	0.003	-----
	-----	-----	-----	331.3	-----	-----
	1.243	1.783	5.454	351.2	0.000	0.010
	-----	-----	-----	-----	-----	0.006
	0.988	1.296	4.115	273.4	0.001	-----
	-----	-----	-----	273.4	-----	-----
	1.258	1.380	4.288	-----	0.002	-----
	0.726	1.366	4.306	-----	0.002	-----
	-----	-----	-----	-----	-----	0.006
	-----	-----	-----	-----	0.003	-----
	0.968	1.363	3.645	-----	0.002	-----
	1.099	1.231	3.649	-----	0.002	-----

2

AFF-108

RJ5, 4-DAY STATIC
1981 JULY 28

CLOCK BY HR.	ELAPSED TIME (MIN)	BSCAT MRI-388	AER.V UM3/CC	AER.N PART/CC	AER.S UM2/CC	I-C5 DMS-1	RJ-5(A) PPM	RJ-5 PPMC VAR
4 1500	4680	-----	-----	-----	-----	-----	-----	-----
4 1505	4685	19.0	28.	5868.	498.	-----	0.912	1.

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

I-CS	RJ-5(A)	RJ-5(B)	RJ-5(C)	FREON 12	PAN	HCHO
PPM	PPMC	PPMC	PPMC	RAW DATA	PPM	PPM
DMS-1	VAR 3700	VAR 3700	VAR 3700	DMS-1	ECD-3	CA
-----	-----	-----	-----	-----	-----	0.008
-----	0.912	1.201	3.421	261.1	0.002	-----

2

AFF-108
RJS, 4-DAY STATIC
1981 JULY 28

CLOCK	ELAPSED	PART.024	PART.042	PART.075	PART.133	PART.237	PART.422	PART.750
TIME	TIME	PART/CC						
DY	HR.	(MIN)	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1	705	-115	501.	174.	222.	0.	0.	13.
1	835	-25	668.	7917.	932.	362.	12.	7.
1	1005	65	1336.	2.0E 04	3.2E 04	6290.	221.	80.
1	1105	125	1169.	6090.	2.8E 04	1.1E 04	492.	53.
1	1205	185	668.	4263.	2.6E 04	9592.	676.	40.
1	1305	245	2839.	87.	1.9E 04	1.1E 04	590.	60.
1	1405	305	2839.	348.	1.3E 04	1.2E 04	738.	67.
1	1505	365	334.	87.	8880.	1.2E 04	873.	7.
1	1605	425	334.	496.	1.7E 04	6844.	603.	27.
2	805	1385	2338.	174.	266.	1012.	0.	40.
2	905	1445	2338.	609.	133.	1060.	185.	47.
2	1005	1505	2672.	261.	-133.	988.	418.	87.
2	1105	1565	1336.	-348.	444.	1012.	344.	-80.
2	1205	1625	1336.	261.	311.	1253.	369.	40.
2	1305	1685	167.	174.	7282.	6748.	172.	47.
2	1405	1745	2171.	1131.	8658.	1.4E 04	1488.	133.
2	1505	1805	6179.	174.	6127.	1.3E 04	1759.	73.
2	1605	1865	-668.	1453.	3952.	1.2E 04	1383.	153.
3	805	2825	4509.	3915.	2797.	337.	135.	40.
3	905	2885	1503.	2784.	8214.	2073.	197.	27.
3	1005	2945	1336.	957.	7992.	3663.	332.	47.
3	1105	3005	1336.	87.	5639.	5061.	234.	47.
3	1205	3065	1336.	957.	4040.	5374.	394.	67.
3	1305	3125	334.	-609.	3996.	4603.	381.	27.
3	1405	3185	1002.	-261.	2575.	4483.	455.	33.
3	1505	3245	835.	174.	1909.	3952.	504.	7.
3	1605	3305	1336.	-435.	2176.	3229.	455.	67.
4	805	4265	3173.	3828.	2042.	48.	111.	73.
4	905	4325	3006.	2001.	5905.	2169.	234.	-80.
4	1005	4385	835.	261.	5150.	4217.	258.	27.
4	1105	4445	167.	1305.	2575.	5302.	578.	13.
4	1205	4505	167.	87.	2220.	5880.	443.	20.
4	1305	4565	1169.	87.	1110.	5133.	640.	13.
4	1405	4625	1503.	87.	1021.	4627.	664.	13.
4	1505	4685	668.	87.	222.	4169.	627.	13.

----- NO DATA TAKEN

517

518
AFF-109
PURE AIR PHOTOLYSIS
1981 AUGUST 3

0715: BEGIN FILL. WET: 6.0 DRY:0.0 WET BULB: 16.0
DRY BULB: 28.5 R.H.=25% DEW PT.=6.6
0825: END FILL.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY, CLEAR, WARM.
1410: END RUN.

RESULTS: OZONE FORMATION RATE = 12.6 PFB/HR

T=0 AT 900 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	30.6	7.1	DEG C
UV RAD	EFFLEY-2	2.66	0.29	MW/CM ²

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIRI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12% CARBOWAX-600 GC; ECD
4131	EFFLEY-2	EPPLLEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR#SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR#SN143
2200	IAMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1	UV RAD MW/CM ² EFFLEY-2	CONDI 10E3 CNC-
1 830	-30	0.000	0.000	0.000	0.000	26.2	-----	0
1 905	5	0.000	0.000	0.000	0.000	26.8	2.45	0
1 935	35	0.005	-----	-----	-----	-----	-----	---
1 1005	65	0.011	-----	-----	-----	-----	-----	---
1 1035	95	0.016	-----	-----	-----	-----	-----	---
1 1105	125	0.023	-----	-----	-----	-----	-----	---
1 1135	155	0.031	-----	-----	-----	-----	-----	---
1 1205	185	0.038	-----	-----	-----	-----	-----	---
1 1235	215	0.046	-----	-----	-----	-----	-----	---
1 1305	245	0.053	-----	-----	-----	-----	-----	---
1 1335	275	0.058	-----	-----	-----	-----	-----	---
1 1405	305	0.064	0.000	0.003	0.001	38.7	2.86	14

----- NO DATA TAKEN

12 NOV 1981

PAGE 1

60

30

1

1

三

2

AFF-109
PURE AIR PHOTOLYSIS
1981 AUGUST 3

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYL PPM PN-
1 830	-30	5.	831.	59.	1.83	0.0028	0.0117	0.00
1 905	5	2.	678.	23.	-----	-----	-----	-----
1 1405	305	19.	5.9E 04	855.	-----	-----	-----	-----

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	N-C4 PPM DMS-1	I-C4= PPM DMS-1	I-C5 PPM DMS-1	RJ-5(A) PPMC VAR 3700	RJ-5(B) PPMC VAR 3700	RJ-5(C) PPM VAR 3	
1 830	-30	0.0007	0.0001	0.0001	0.0001	3.3E 04	7.9E 04	1.8E
1 905	5	-----	-----	-----	-----	-----	-----	-----
1 910	10	-----	-----	-----	-----	-----	-----	-----
1 1400	300	-----	-----	-----	-----	-----	-----	-----
1 1405	305	-----	-----	-----	-----	-----	-----	-----

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 830	-30	609.	-577.	217.	37.	27.	18.
1 905	5	435.	-178.	48.	25.	7.	7.
1 1405	305	1.5E 04	2.7E 04	2964.	221.	27.	28.

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

NE	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM PN-1	ACETYLEN PPM DMS-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	I-C4 PPM DMS-1
1	0.0028	0.0117	0.0033	0.0034	0.0036	0.0003	0.0014
3	-----	-----	-----	-----	-----	-----	-----
5	RJ-5(A) PPMC VAR 3700	RJ-5(B) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	PAN PPM ECD-3	HCHO PPM CA	RT=42.56 RAW DATA VAR 3700	PART.024 PART/CC TSI-023
1	3.3E 04	7.9E 04	1.8E 05	----- 0.003	----- 0.004	2.3E 04	501. 334.
01	-----	-----	-----	----- 0.006	-----	-----	-----
01	-----	-----	-----	0.002	-----	-----	1.4E 04
237	PART.422	PART.750					
CC	PART/CC	PART/CC					
023	TSI-023	TSI-023					

27. 18.
7. 7.
27. 28.

2

AFF-110

RJ-5, VARIABLE NOX
1981 AUGUST 4

DAY 1 (AUGUST 4)

0500: START FILL. NET: 6.0 DRY: 0.0 WET BULB: 12.4
DRY BULB: 20.5 DEW PT.=5.3 R.H.=38%
0610: END FILL.
0626: INJECTED 540 MICROLITERS OF RJ-5 AT 250 DEGREES C FOR 30 MIN.
0700: MIX BAG, DIVIDE BAG.
0716: INJECTED 2.5 ML. NO₂ INTO SIDE A.
0718: INJECTED 9.0 ML. NO INTO SIDE A.
0726: INJECTED 1.25 ML. NO₂ INTO SIDE B.
0728: INJECTED 4.5 ML. NO INTO SIDE B.
0730: MIX SIDE A; MIX SIDE B.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY, CLEAR, WARM, SLIGHT BREEZE.
1630: BAG COVERED.

DAY 2 (AUGUST 5)

0900: UNCOVER BAG, DAY 2.
0905: WEATHER: SUNNY AND CLEAR.
1520: SAMPLING ENDED, RUN OVER.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	37(+/-2)	38(+/-4)
AVG.UV(MW/CM ²)	2.8(+/-1.0)	2.9(+/-0.7)

T=0 AT 900 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	34.5	6.7	DEG C
T	DORIC-1	34.9	5.9	DEG C
UV RAD	EPPLEY-2	2.86	0.88	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.348	PPM
NO	B-NOX-1	0.159	PPM
NO ₂ -UNC	B-NOX-1	0.152	PPM
NO ₂ -UNC	B-NOX-1	0.055	PPM
THC	BK6800-1	9.53	PPMC
THC	BK6800-1	10.60	PPMC

AFF-110
RJ-5, VARIABLE NOX
1981 AUGUST 4

INSTRUMENTS USED

ID	LABEL	DESCRIPTION	SAMPLING RATE (ML/MIN)
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID	
2100	PN-1	RM-121 POROPAK-N GC; FID	
1790	D-1790	DASIBI 1790 OZONE MONITOR	
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2	
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479	
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG	
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030	
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148	
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B	
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143	
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS	
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015I	
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD	
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID	

AFF-110

RJ-5, VARIABLE NUX
1981 AUGUST 4

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX- PP
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.
1 835	-25	0.003	-----	0.348	-----	0.152	-----	0.
1 845	-15	-----	0.003	-----	0.159	-----	0.055	---
1 1005	65	0.010	-----	0.299	-----	0.181	-----	0.
1 1015	75	-----	0.008	-----	0.180	-----	0.080	---
1 1105	125	0.011	-----	0.260	-----	0.203	-----	0.
1 1115	135	-----	0.011	-----	0.102	-----	0.099	---
1 1205	185	0.011	-----	0.222	-----	0.232	-----	0.
1 1215	195	-----	0.017	-----	0.078	-----	0.120	---
1 1305	245	0.008	-----	0.179	-----	0.250	-----	0.
1 1315	255	-----	0.023	-----	0.050	-----	0.138	---
1 1405	305	0.017	-----	0.140	-----	0.281	-----	0.
1 1415	315	-----	0.035	-----	0.031	-----	0.148	---
1 1505	365	0.019	-----	0.111	-----	0.301	-----	0.
1 1515	375	-----	0.051	-----	0.020	-----	0.149	---
1 1605	425	0.021	-----	0.089	-----	0.311	-----	0.
1 1615	435	-----	0.066	-----	0.013	-----	0.145	---
<hr/>								
2 835	1415	0.005	-----	0.049	-----	0.342	-----	0.
2 845	1425	-----	0.004	-----	0.001	-----	0.079	---
2 1005	1505	0.043	-----	0.057	-----	0.316	-----	0.
2 1015	1515	-----	0.052	-----	0.014	-----	0.063	---
2 1105	1565	0.061	-----	0.041	-----	0.312	-----	0.
2 1115	1575	-----	0.084	-----	0.008	-----	0.059	---
2 1205	1625	0.088	-----	0.028	-----	0.308	-----	0.
2 1215	1635	-----	0.130	-----	0.002	-----	0.050	---
2 1305	1685	0.134	-----	0.016	-----	0.290	-----	0.
2 1315	1695	-----	0.180	-----	0.003	-----	0.035	---
2 1405	1745	0.212	-----	0.008	-----	0.242	-----	0.
2 1415	1755	-----	0.204	-----	0.001	-----	0.020	---
2 1505	1805	0.317	-----	0.007	-----	0.172	-----	0.
2 1515	1815	-----	0.203	-----	0.004	-----	0.016	---

----- NO DATA TAKEN

522

12 NOV 1981

PAGE 3

	SIDE 1 NO2-UNC PPM	SIDE 2 NO2-UNC PPM	SIDE 1 NOX-UNC PPM	SIDE 2 NOX-UNC PPM	SIDE 1 THC PPMC	SIDE 2 THC PPMC
X-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	BK6800-1	BK6800-1
000	0.000	0.000	0.000	0.000	3.39	3.39
001	0.152	-----	0.482	-----	9.53	-----
002	-----	0.055	-----	0.201	-----	10.60
003	0.181	-----	0.470	-----	10.10	-----
004	-----	0.080	-----	0.207	-----	10.00
005	0.203	-----	0.483	-----	10.10	-----
006	-----	0.099	-----	0.200	-----	10.70
007	0.232	-----	0.469	-----	11.00	-----
008	-----	0.120	-----	0.195	-----	10.60
009	0.250	-----	0.455	-----	9.70	-----
010	-----	0.138	-----	0.187	-----	10.30
011	0.281	-----	0.442	-----	10.60	-----
012	-----	0.148	-----	0.175	-----	11.00
013	0.301	-----	0.425	-----	10.60	-----
014	-----	0.149	-----	0.168	-----	11.60
015	0.311	-----	0.410	-----	10.60	-----
016	-----	0.145	-----	0.155	-----	10.80
017	-----	0.342	-----	0.399	-----	----- B -----
018	-----	0.079	-----	0.080	-----	----- B -----
019	0.316	-----	0.380	-----	-----	-----
020	-----	0.063	-----	0.075	-----	-----
021	0.312	-----	0.359	-----	-----	-----
022	-----	0.059	-----	0.065	-----	-----
023	0.308	-----	0.338	-----	-----	-----
024	-----	0.050	-----	0.052	-----	-----
025	0.290	-----	0.304	-----	-----	-----
026	-----	0.035	-----	0.037	-----	-----
027	0.242	-----	0.251	-----	10.60	-----
028	-----	0.020	-----	0.021	-----	10.70
029	0.172	-----	0.178	-----	9.90	-----
030	-----	0.016	-----	0.018	-----	11.00

J

AFF-110
RJ-5, VARIABLE NOX
1981 AUGUST 4

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2 EPPLEY-2	SIDE 1	SIDE 2	SIDE 1	SIDE 1
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143	PART>.3 PART/CC CLIMET	PART PART/CC CLIMET
1 605	-175	18.5	18.5	-----	0.6	0.6	3.	---
1 835	-25	26.3	-----	-----	11.0	-----	0.	---
1 845	-15	-----	28.1	-----	-----	10.0	-----	---
1 1005	65	30.5	-----	1.91	11.0	-----	0.	---
1 1015	75	-----	33.4	2.66	-----	11.5	-----	---
1 1105	125	35.2	-----	4.09	9.5	-----	28.	---
1 1115	135	-----	36.5	4.05	-----	8.9	-----	---
1 1205	185	38.1	-----	3.37	7.5	-----	170.	---
1 1215	195	-----	37.7	4.14	-----	7.8	-----	7
1 1305	245	39.3	-----	3.59	5.9	-----	309.	---
1 1315	255	-----	39.2	3.50	-----	6.0	-----	21
1 1405	305	39.4	-----	2.77	4.6	-----	374.	---
1 1415	315	-----	38.2	2.73	-----	4.8	-----	32
1 1505	365	38.5	-----	2.00	3.5	-----	404.	---
1 1515	375	-----	37.4	1.82	-----	3.9	-----	37
1 1605	425	36.3	-----	1.28	2.7	-----	415.	---
1 1615	435	-----	35.7	1.28	-----	3.0	-----	39
2 835	1415	25.5	-----	-----	0.0	-----	133.	---
2 845	1425	-----	27.2	-----	-----	0.0	-----	24
2 1005	1505	29.6	-----	2.00	0.1	-----	224.	---
2 1015	1515	-----	31.7	2.73	-----	0.0	-----	20
2 1105	1565	33.8	-----	3.82	0.2	-----	354.	---
2 1115	1575	-----	35.8	3.73	-----	0.2	-----	24
2 1205	1625	37.7	-----	3.09	0.3	-----	341.	---
2 1215	1635	-----	37.9	3.64	-----	1.5	-----	31
2 1305	1685	40.0	-----	3.28	0.3	-----	292.	---
2 1315	1695	-----	40.3	3.28	-----	4.4	-----	38
2 1405	1745	42.6	-----	3.19	0.1	-----	271.	---
2 1415	1755	-----	41.0	3.00	-----	4.1	-----	42
2 1505	1805	41.0	-----	1.87	2.8	-----	395.	---
2 1515	1815	-----	39.3	1.68	-----	3.5	-----	42

----- NO DATA TAKEN

523

12 NOV 1981

PAGE 4

1 NS CC 43	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
6 0	0.5 ----- 0.	3. ----- 0.	3. ----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.
0	10.0 ----- 0.	----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.
5	11.5 ----- 28.	----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.
5	8.9 ----- 170.	----- 3.	----- 5.	0. ----- 0.	0. ----- 0.	0. ----- 0.	0. ----- 0.
5	7.8 ----- 309.	----- 71.	----- 53.	0. ----- 12.	0. ----- 2.	0. ----- 0.	0. ----- 0.
6	6.0 ----- 374.	----- 216.	----- 131.	0. ----- 65.	0. ----- 10.	0. ----- 2.	0. ----- 0.
5	4.8 ----- 404.	----- 320.	----- 193.	0. ----- 130.	0. ----- 18.	0. ----- 8.	0. ----- 0.
7	3.9 ----- 415.	----- 371.	----- 220.	0. ----- 178.	0. ----- 19.	0. ----- 19.	0. ----- 40.
0	3.0 ----- 133.	----- 243.	12. ----- 100.	42. ----- 171.	3. ----- 8.	0. ----- 12.	0. ----- 5.
4	0.0 ----- 224.	----- 206.	0. ----- 141.	0. ----- 175.	0. ----- 19.	0. ----- 19.	0. ----- 40.
2	0.2 ----- 354.	----- 245.	0. ----- 214.	0. ----- 182.	0. ----- 42.	0. ----- 47.	0. ----- 46.
3	1.5 ----- 292.	----- 314.	0. ----- 289.	0. ----- 234.	0. ----- 58.	0. ----- 98.	0. ----- 46.
3	4.4 ----- 271.	----- 420.	0. ----- 238.	0. ----- 257.	0. ----- 259.	0. ----- 259.	0. ----- 259.
8	4.1 ----- 395.	----- 426.	0. ----- 264.	0. ----- 259.	0. ----- 259.	0. ----- 259.	0. ----- 259.
	3.5 ----- 426.	----- 426.	0. ----- 264.	0. ----- 259.	0. ----- 259.	0. ----- 259.	0. ----- 259.

AFF-110

RJ-5, VARIABLE NOX

1981 AUGUST 4

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		BSCAT 10-4 M-1	BSCAT 10-4 M-1	AER.V UM3/CC	AER.V UM3/CC	AER.N PART/CC	AER.N PART/CC	SI UM TSI
		MRI-388	MRI-388	TSI-023	TSI-023	TSI-023	TSI-023	TSI
1 605	-175	0.0	0.0	1.	1.	2547.	2547.	
1 740	-80	-----	-----	-----	-----	-----	-----	
1 835	-25	0.0	-----	6.	-----	2.0E 04	-----	1
1 845	-15	-----	0.0	-----	2.	-----	1.5E 04	-----
1 1005	65	3.5	-----	22.	-----	5.0E 04	-----	7
1 1015	75	-----	2.5	-----	25.	-----	3.9E 04	-----
1 1105	125	6.2	-----	42.	-----	4.6E 04	-----	9
1 1115	135	-----	4.8	-----	24.	-----	3.3E 04	-----
1 1205	185	10.0	-----	22.	-----	4.0E 04	-----	8
1 1215	195	-----	9.0	-----	34.	-----	3.1E 04	-----
1 1305	245	17.0	-----	30.	-----	3.6E 04	-----	9
1 1315	255	-----	12.5	-----	29.	-----	2.8E 04	-----
1 1405	305	22.0	-----	26.	-----	3.3E 04	-----	8
1 1415	315	-----	17.0	-----	22.	-----	2.8E 04	-----
1 1505	365	21.0	-----	35.	-----	2.8E 04	-----	8
1 1515	375	-----	20.0	-----	28.	-----	2.4E 04	-----
1 1605	425	26.0	-----	27.	-----	2.5E 04	-----	7
1 1615	435	-----	23.5	-----	28.	-----	2.1E 04	-----
2 715	1335	-----	-----	-----	-----	-----	-----	-----
2 815	1395	-----	-----	-----	-----	-----	-----	-----
2 835	1415	1.9	-----	4.	-----	4748.	-----	-----
2 845	1425	-----	4.1	-----	7.	-----	3585.	-----
2 1005	1505	5.0	-----	3.	-----	4382.	-----	-----
2 1015	1515	-----	4.2	-----	5.	-----	2905.	-----
2 1105	1565	7.4	-----	11.	-----	5784.	-----	1
2 1115	1575	-----	5.2	-----	5.	-----	3413.	-----
2 1205	1625	7.6	-----	7.	-----	5091.	-----	1
2 1215	1635	-----	8.0	-----	7.	-----	8578.	-----
2 1305	1685	7.2	-----	6.	-----	3956.	-----	1
2 1315	1695	-----	15.0	-----	12.	-----	2.6E 04	-----
2 1405	1745	8.0	-----	10.	-----	5730.	-----	1
2 1415	1755	-----	21.0	-----	23.	-----	2.8E 04	-----
2 1505	1805	20.0	-----	18.	-----	2.3E 04	-----	5
2 1515	1815	-----	22.0	-----	26.	-----	2.6E 04	-----

----- NO DATA TAKEN

524

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S JM2/CC TSI-023	SIDE 1 RJ-5(A) PPMC VAR 3700	SIDE 2 RJ-5(A) PPMC VAR 3700
2547.	2547.	19.	19.	-----	-----
-----	-----	-----	-----	0.472	-----
2.0E 04	-----	161.	-----	-----	-----
-----	1.5E 04	-----	74.	-----	0.556
5.0E 04	-----	798.	-----	0.620	-----
-----	3.9E 04	-----	690.	-----	-----
4.6E 04	-----	949.	-----	-----	-----
-----	3.3E 04	-----	739.	-----	0.611
4.0E 04	-----	843.	-----	0.769	-----
-----	3.1E 04	-----	977.	-----	-----
3.6E 04	-----	916.	-----	-----	-----
-----	2.8E 04	-----	796.	-----	0.862
3.3E 04	-----	864.	-----	-----	-----
-----	2.8E 04	-----	731.	-----	-----
2.8E 04	-----	866.	-----	0.623	-----
-----	2.4E 04	-----	741.	-----	-----
2.5E 04	-----	746.	-----	-----	-----
-----	2.1E 04	-----	687.	-----	0.834
-----	-----	-----	-----	0.822	-----
-----	-----	-----	-----	-----	0.513 A
4748.	-----	78.	-----	-----	-----
-----	3585.	-----	101.	-----	-----
4382.	-----	96.	-----	0.817	-----
-----	2905.	-----	102.	-----	-----
5784.	-----	173.	-----	-----	-----
-----	3413.	-----	97.	-----	0.823
5091.	-----	153.	-----	-----	-----
-----	8578.	-----	175.	-----	-----
3956.	-----	132.	-----	-----	-----
-----	2.6E 04	-----	397.	-----	0.615
5730.	-----	167.	-----	0.728	-----
-----	2.8E 04	-----	581.	-----	-----
2.3E 04	-----	505.	-----	-----	-----
-----	2.6E 04	-----	597.	-----	0.576

2

AFF-110
 RJ-5. VARIABLE NOX
 1981 AUGUST 4

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SI H PI
		RJ-5(B) PPMC VAR 3700	RJ-5(B) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	PAN PPM ECD-3	PAN PPM ECD-3					
1 605	-175	0.089		0.089		0.098		0.098		0.000		0.000		
1 740	-80	0.887		-----		3.258		-----		-----		-----		
1 810	-50	-----		-----		-----		-----		-----		-----	0	
1 835	-25	-----		-----		-----		-----		-----		-----		
1 845	-15	-----		1.064		-----		4.216		-----		0.000		
1 1005	65	1.134		-----		4.830		-----		0.001		-----		
1 1015	75	-----		-----		-----		-----		-----		0.000		
1 1105	125	-----		-----		-----		-----		0.001		-----		
1 1115	135	-----		1.185		-----		4.604		-----		0.000		
1 1200	180	-----		-----		-----		-----		-----		-----	0	
1 1205	185	1.044		-----		3.965		-----		0.001		-----		
1 1215	195	-----		-----		-----		-----		-----		0.001		
1 1305	245	-----		-----		-----		-----		0.001		-----		
1 1315	255	-----		1.190		-----		4.666		-----		0.000		
1 1405	305	-----		-----		-----		-----		0.001		-----		
1 1415	315	-----		-----		-----		-----		-----		0.000		
1 1505	365	1.304		-----		4.654		-----		0.000		-----		
1 1515	375	-----		-----		-----		-----		-----		0.000		
1 1605	425	-----		-----		-----		-----		0.000		-----		
1 1610	430	-----		-----		-----		-----		-----		-----	0	
1 1615	435	-----		1.177		-----		4.471		-----		0.000		
2 715	1335	0.990		-----		3.707		-----		-----		-----		
2 810	1390	-----		-----		-----		-----		-----		-----	0	
2 815	1395	-----		1.090 A		-----		3.784 A		-----		-----		
2 835	1415	-----		-----		-----		-----		0.000		-----		
2 845	1425	-----		-----		-----		-----		-----		0.000		
2 1005	1505	1.142		-----		3.959		-----		0.000		-----		
2 1015	1515	-----		-----		-----		-----		-----		0.000		
2 1105	1565	-----		-----		-----		-----		0.002		-----		
2 1115	1575	-----		1.121		-----		4.040		-----		0.001		
2 1200	1620	-----		-----		-----		-----		-----		-----	0	
2 1205	1625	-----		-----		-----		-----		0.001		-----		
2 1215	1635	-----		-----		-----		-----		-----		0.000		
2 1305	1685	-----		-----		-----		-----		0.001		-----		
2 1315	1695	-----		1.288		-----		4.037		-----		0.000		
2 1405	1745	0.974		-----		3.135		-----		0.002		-----		
2 1415	1755	-----		-----		-----		-----		-----		0.000		
2 1505	1805	-----		-----		-----		-----		0.002		-----		
2 1510	1810	-----		-----		-----		-----		-----		-----	0	
2 1515	1815	-----		1.108		-----		3.752		-----		0.001		

----- NO DATA TAKEN

525

12 NOV 1981
PAGE 6

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
PAN	PAN	HCHO	HCHO	PART.024	PART.024
PPM	PPM	PPM	PPM	PART/CC	PART/CC
ECD-3	ECD-3	CA	CA	TSI-023	TSI-023
0.000	0.000	-----	-----	2505.	2505.
-----	-----	-----	-----	-----	-----
-----	-----	0.002	0.002	-----	-----
-----	-----	-----	-----	1.5E 04	-----
-----	-----	0.000	-----	-----	1.1E 04
0.001	-----	-----	-----	3.1E 04	-----
-----	0.000	-----	-----	-----	2.0E 04
0.001	-----	-----	-----	3.0E 04	-----
-----	0.000	-----	-----	-----	1.6E 04
-----	-----	0.006	0.004	-----	-----
0.001	-----	-----	-----	2.2E 04	-----
-----	0.001	-----	-----	-----	1.2E 04
0.001	-----	-----	-----	1.7E 04	-----
-----	0.000	-----	-----	-----	1.0E 04
0.001	-----	-----	-----	1.7E 04	-----
-----	0.000	-----	-----	-----	1.2E 04
0.000	-----	-----	-----	1.8E 04	-----
-----	0.000	-----	-----	-----	1.4E 04
0.000	-----	-----	-----	1.7E 04	-----
-----	-----	0.004	0.006	-----	-----
-----	0.000	-----	-----	-----	1.2E 04
-----	-----	-----	-----	-----	-----
-----	-----	0.015	0.008	-----	-----
0.000	-----	-----	-----	4008.	-----
-----	0.000	-----	-----	-----	2839.
0.000	-----	-----	-----	2672.	-----
0.002	-----	-----	-----	4342.	-----
-----	0.001	-----	-----	-----	1837.
-----	-----	0.008	0.000	-----	-----
0.001	-----	-----	-----	4008.	-----
-----	0.000	-----	-----	-----	6012.
0.001	-----	-----	-----	3006.	-----
-----	0.000	-----	-----	-----	1.8E 04
0.002	-----	-----	-----	4175.	-----
-----	0.000	-----	-----	-----	1.5E 04
0.002	-----	-----	-----	1.4E 04	-----
-----	-----	0.008	0.004	-----	-----
-----	0.001	-----	-----	-----	1.7E 04

2

AFF-110

RJ-5, VARIABLE NOX
1981 AUGUST 4

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART,042 PART/CC TSI-023	SIDE 2 PART,042 PART/CC TSI-023	SIDE 1 PART,075 PART/CC TSI-023	SIDE 2 PART,075 PART/CC TSI-023	SIDE 1 PART,133 PART/CC TSI-023	SIDE 2 PART,133 PART/CC TSI-023	SIDE 1 PART, PART TSI-
1 605	-175	0.	0.	-44.	-44.	0.	0.	8
1 835	-25	2088.	-----	2176.	-----	482.	-----	2
1 845	-15	-----	2436.	-----	1288.	-----	24.	---
1 1005	65	957.	-----	1.2E 04	-----	5784.	-----	66
1 1015	75	-----	3219.	-----	1.1E 04	-----	4314.	---
1 1105	125	174.	-----	8170.	-----	6435.	-----	68
1 1115	135	-----	1827.	-----	8836.	-----	5688.	---
1 1205	185	435.	-----	8036.	-----	8772.	-----	64
1 1215	195	-----	1218.	-----	1.1E 04	-----	3446.	---
1 1305	245	1479.	-----	7592.	-----	9158.	-----	68
1 1315	255	-----	1566.	-----	8969.	-----	6868.	---
1 1405	305	522.	-----	5639.	-----	8748.	-----	98
1 1415	315	-----	957.	-----	6971.	-----	7206.	---
1 1505	365	435.	-----	1643.	-----	6579.	-----	158
1 1515	375	-----	435.	-----	1865.	-----	6459.	---
1 1605	425	-957.	-----	1376.	-----	5953.	-----	158
1 1615	435	-----	261.	-----	1421.	-----	6507.	---
<hr/>								
2 835	1415	435.	-----	0.	-----	193.	-----	1
2 845	1425	-----	174.	-----	44.	-----	386.	---
2 1005	1505	435.	-----	444.	-----	482.	-----	36
2 1015	1515	-----	-87.	-----	266.	-----	193.	---
2 1105	1565	87.	-----	533.	-----	410.	-----	34
2 1115	1575	-----	435.	-----	710.	-----	217.	---
2 1205	1625	-87.	-----	178.	-----	554.	-----	34
2 1215	1635	-----	261.	-----	755.	-----	1301.	---
2 1305	1685	-87.	-----	178.	-----	482.	-----	30
2 1315	1695	-----	609.	-----	4129.	-----	3326.	---
2 1405	1745	348.	-----	444.	-----	337.	-----	34
2 1415	1755	-----	2175.	-----	5461.	-----	4338.	---
2 1505	1805	-435.	-----	3818.	-----	4073.	-----	59
2 1515	1815	-----	1044.	-----	2975.	-----	4097.	---

----- NO DATA TAKEN

526

12 NOV 1981
PAGE 7

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
2	PART.133	FART.133	PART.237	PART.237	PART.422	PART.422
75	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
C	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	0.	0.	86.	86.	0.	0.
	482.	-----	25.	-----	73.	-----
	-----	24.	-----	0.	-----	7.
	5784.	-----	664.	-----	93.	-----
4	-----	4314.	-----	455.	-----	87.
	6435.	-----	689.	-----	220.	-----
	-----	5688.	-----	689.	-----	113.
4	8772.	-----	640.	-----	73.	-----
	-----	3446.	-----	2460.	-----	167.
	9158.	-----	689.	-----	80.	-----
	-----	6868.	-----	566.	-----	53.
	8748.	-----	984.	-----	60.	-----
	-----	7206.	-----	517.	-----	93.
	6579.	-----	1587.	-----	127.	-----
	-----	6459.	-----	1119.	-----	113.
	5953.	-----	1587.	-----	100.	-----
	-----	6507.	-----	1009.	-----	13.
	193.	-----	12.	-----	100.	-----
	-----	386.	-----	61.	-----	67.
	482.	-----	369.	-----	-20.	-----
	-----	193.	-----	344.	-----	7.
	410.	-----	344.	-----	40.	-----
	-----	217.	-----	160.	-----	47.
	554.	-----	344.	-----	93.	-----
	-----	1301.	-----	172.	-----	73.
	482.	-----	308.	-----	67.	-----
	-----	3326.	-----	418.	-----	0.
	337.	-----	344.	-----	60.	-----
	-----	4338.	-----	517.	-----	47.
	4073.	-----	590.	-----	73.	-----
	-----	4097.	-----	1009.	-----	7.

2

AFF-110
RJ-5, VARIABLE NOX
1981 AUGUST 4

	CLOCK	ELAPSED	SIDE 1	SIDE 2
	TIME	TIME	PART/750	PART/750
BY HR.	(MIN)		TSI-023	TSI-023
	1 605	-175	0.	0.
	1 835	-25	7.	-----
	1 845	-15	-----	7.
	1 1005	65	18.	-----
	1 1015	75	-----	46.
	1 1105	125	84.	-----
	1 1115	135	-----	25.
	1 1205	185	11.	-----
	1 1215	195	-----	18.
	1 1305	245	39.	-----
	1 1315	255	-----	56.
	1 1405	305	21.	-----
	1 1415	315	-----	21.
	1 1505	365	49.	-----
	1 1515	375	-----	35.
	1 1605	425	18.	-----
	1 1615	435	-----	53.
	2 835	1415	0.	-----
	2 845	1425	-----	14.
	2 1005	1505	0.	-----
527	2 1015	1515	-----	11.
	2 1105	1565	28.	-----
	2 1115	1575	-----	7.
	2 1205	1625	0.	-----
	2 1215	1635	-----	4.
	2 1305	1685	4.	-----
	2 1315	1695	-----	18.
	2 1405	1745	21.	-----
	2 1415	1755	-----	49.
	2 1505	1805	25.	-----
	2 1515	1815	-----	56.

----- NO DATA TAKEN

NOTES

- A PRESSURE REGULATING COLUMN FLOW WAS HIGH, CHANGING RETENTION TIMES.
B BECKMAN WAS OFF DURING THE SECOND DAY FROM 0835 TO 1315.

AFF-111
RJ-5, VARIABLE FUEL
1981 AUGUST 6,7

DAY 1 (AUGUST 6)

0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 3.4
DRY BULB: 20.3 DEW PT.: 7.6 R.H.: 45%
0555: END FILL.
0625: INJECTED 5.0 ML. NO₂.
0627: INJECTED 18.0 ML. NO.
0630: MIX AND DIVIDE BAG.
0640: INJECTED 540 MICROLITERS RJ-5 INTO SIDE A AND
270 MICROLITERS RJ-5 INTO SIDE B AT 250 DEGREES C
FOR 30 MINUTES.

NOTE: THE HEATING TAPE IN SIDE A DID NOT WORK PROPERLY,
AND THE SIDE A INJECTION WAS CONTINUED FOR AN
ADDITIONAL 15 MINUTES.

0715: MIX SIDE B.
0730: MIX SIDE A.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HOT.
1620: SAMPLING OVER, DAY 1.

DAY 2 (AUGUST 7)

0900: UNCOVER BAG, DAY 2.
0905: WEATHER: SUNNY AND HOT.

RESULTS	DAY 1	DAY 2
AVG. T (DEG. C)	39 (+-3)	39 (+-2)
AVG. UV (MW/CM ²)	2.5 (+-0.8)	2.7 (+-0.7)

528 T=0 AT 900 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	36.2	6.2	DEG C	SIDE 1
T	DORIC-1	36.6	5.6	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.59	0.76	MW/CM ²	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.362	PPM	SIDE 1
NO	B-NOX-1	0.367	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.108	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.111	PPM	SIDE 2
THC	BK6800-1	19.70	PPMC	SIDE 1
THC	BK6800-1	13.00	PPMC	SIDE 2

AFF-111
RJ-5, VARIABLE FUEL
1981 AUGUST 6,7

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP, GC; FID
2100	FN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD

APP -111
 RJ-5, VARIABLE FUEL
 1981 AUGUST 6,7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SI NOX P B-N
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	
1 605	-175	0.002	0.002	0.001	0.001	0.000	0.000	0
1 835	-25	0.005	-----	0.362	-----	0.108	-----	0
1 845	-15	-----	0.001	-----	0.367	-----	0.111	---
1 1005	65	0.009	-----	0.281	-----	0.159	-----	0
1 1015	75	-----	0.005	-----	0.288	-----	0.160	---
1 1105	125	0.011	-----	0.215	-----	0.200	-----	0
1 1115	135	-----	0.008	-----	0.233	-----	0.197	---
1 1205	185	0.019	-----	0.140	-----	0.250	-----	0
1 1215	195	-----	0.011	-----	0.177	-----	0.234	---
1 1305	245	0.036	-----	0.072	-----	0.302	-----	0
1 1315	255	-----	0.013	-----	0.121	-----	0.276	---
1 1405	305	0.078	-----	0.029	-----	0.311	-----	0
1 1415	315	-----	0.020	-----	0.078	-----	0.305	---
1 1505	365	0.158	-----	0.010	-----	0.265	-----	0
1 1515	375	-----	0.036	-----	0.050	-----	0.319	---
1 1605	425	0.270	-----	0.005	-----	0.159	-----	0
1 1615	435	-----	0.040	-----	0.029	-----	0.324	---
2 835	1415	0.135	-----	0.008	-----	0.012	-----	0
2 845	1425	-----	0.009	-----	0.009	-----	0.280	---
2 1005	1505	0.130	-----	0.008	-----	0.012	-----	0
2 1015	1515	-----	0.096	-----	0.029	-----	0.235	---
2 1105	1565	0.130	-----	0.008	-----	0.013	-----	0
2 1115	1575	-----	0.150	-----	0.029	-----	0.215	---
2 1205	1625	0.132	-----	0.009	-----	0.019	-----	0
2 1215	1635	-----	0.254	-----	0.010	-----	0.165	---
2 1305	1685	0.133	-----	0.004	-----	0.018	-----	0
2 1315	1695	-----	0.375	-----	0.009	-----	0.089	---
2 1405	1745	0.134	-----	0.005	-----	0.018	-----	0
2 1415	1755	-----	0.409	-----	0.009	-----	0.035	---
2 1505	1805	0.131	-----	0.005	-----	0.015	-----	0
2 1515	1815	-----	0.387	-----	0.008	-----	0.020	---

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
001	0.000	0.000	0.001	0.001	3.30	3.30
---	0.108	-----	0.476	-----	15.80 B	-----
367	-----	0.111	-----	0.489	-----	11.40 B
---	0.159	-----	0.453	-----	19.70	-----
288	-----	0.160	-----	0.461	-----	13.00
---	0.200	-----	0.436	-----	19.80	-----
233	-----	0.197	-----	0.450	-----	12.00
---	0.250	-----	0.408	-----	19.00	-----
177	-----	0.234	-----	0.431	-----	12.20
---	0.302	-----	0.382	-----	20.20	-----
121	-----	0.276	-----	0.412	-----	11.80
---	0.311	-----	0.342	-----	19.70	-----
078	-----	0.305	-----	0.392	-----	10.80
---	0.265	-----	0.280	-----	17.70	-----
950	-----	0.319	-----	0.376	-----	10.90
---	0.159	-----	0.167	-----	17.20	-----
029	-----	0.324	-----	0.358	-----	11.50
---	0.012	-----	0.019	-----	14.90	-----
009	-----	0.280	-----	0.289	-----	10.70
---	0.012	-----	0.019	-----	15.70	-----
029	-----	0.235	-----	0.260	-----	10.60
---	0.013	-----	0.020	-----	16.40	-----
029	-----	0.215	-----	0.228	-----	10.60
---	0.019	-----	0.021	-----	16.00	-----
010	-----	0.165	-----	0.175	-----	10.40
---	0.018	-----	0.021	-----	16.60	-----
009	-----	0.089	-----	0.091	-----	10.00
---	0.018	-----	0.021	-----	17.20	-----
009	-----	0.035	-----	0.041	-----	10.00
---	0.015	-----	0.020	-----	16.70	-----
008	-----	0.020	-----	0.025	-----	9.83

J

AFF-111
 RJ-5, VARIABLE FUEL
 1981 AUGUST 6,7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2 EPPLEY-2	SIDE 1	SIDE 2	SIDE 1	SIDE 1
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC CNC-143	CONDENS 10E3/CC CNC-143	PART/CC CLIMET	#PART>,3 PAR CL
1 605	-175	20.0	20.0	-----	0.0	0.0	1.	---
1 835	-25	27.8	-----	-----	13.2	-----	0.	---
1 845	-15	-----	29.1	-----	-----	22.0	-----	---
1 1005	65	32.4	-----	2.00	12.2	-----	71.	---
1 1015	75	-----	35.0	2.41	-----	16.4	-----	---
1 1105	125	37.3	-----	3.46	10.0	-----	312.	---
1 1115	135	-----	38.2	3.55	-----	12.6	-----	---
1 1205	185	40.0	-----	2.96	8.2	-----	421.	---
1 1215	195	-----	40.2	3.37	-----	10.0	-----	2
1 1305	245	41.4	-----	3.09	6.5	-----	455.	---
1 1315	255	-----	40.8	3.00	-----	8.0	-----	3
1 1405	305	42.3	-----	2.54	5.2	-----	470.	---
1 1415	315	-----	40.7	2.45	-----	6.2	-----	4
1 1505	365	40.3	-----	1.87	4.8	-----	486.	---
1 1515	375	-----	39.7	1.73	-----	5.8	-----	4
1 1605	425	37.5	-----	1.09	3.8	-----	516.	---
1 1615	435	-----	37.1	1.00	-----	4.8	-----	4
<hr/>								
2 835	1415	29.0	-----	-----	0.3	-----	176.	---
2 845	1425	-----	31.1	-----	-----	0.3	-----	3
2 1005	1505	33.5	-----	2.00	50.0	-----	125.	---
2 1015	1515	-----	36.0	2.59	-----	0.2	-----	3
2 1105	1565	37.7	-----	3.52	38.0	-----	99.	---
2 1115	1575	-----	38.1	3.23	-----	0.2	-----	3
2 1205	1625	40.2	-----	3.19	27.0	-----	127.	---
2 1215	1635	-----	40.7	3.50	-----	10.5	-----	3
2 1305	1685	40.4	-----	3.23	20.0	-----	303.	---
2 1315	1695	-----	39.8	3.19	-----	5.0	-----	4
2 1405	1745	41.0	-----	2.59	28.0	-----	394.	---
2 1415	1755	-----	40.3	2.45	-----	4.5	-----	4
2 1505	1805	38.7	-----	1.73	10.1	-----	418.	---
2 1515	1815	-----	38.1	1.64	-----	3.5	-----	4

----- NO DATA TAKEN

531

12 NOV 1981
PAGE 4

	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 *PART>.3 PART/CC CLIMET	SIDE 2 *PART>.3 PART/CC CLIMET	SIDE 1 *PART>.5 PART/CC CLIMET	SIDE 2 *PART>.5 PART/CC CLIMET	SIDE 1 *PART>1 PART/CC CLIMET	SIDE 2 *PART>1 PART/CC CLIMET
	0.0	1.	1.	0.	0.	0.	0.
	-----	0.	-----	0.	-----	0.	-----
	22.0	-----	0.	-----	0.	-----	0.
	-----	71.	-----	0.	-----	0.	-----
	16.4	-----	1.	-----	0.	-----	0.
	-----	312.	-----	44.	-----	0.	-----
	12.6	-----	79.	-----	0.	-----	0.
	-----	421.	-----	189.	-----	7.	-----
	10.0	-----	279.	-----	27.	-----	0.
	-----	455.	-----	303.	-----	56.	-----
	8.0	-----	394.	-----	137.	-----	2.
	-----	470.	-----	365.	-----	122.	-----
	6.2	-----	433.	-----	234.	-----	18.
	-----	486.	-----	399.	-----	169.	-----
	5.8	-----	447.	-----	288.	-----	46.
	-----	516.	-----	440.	-----	219.	-----
	4.8	-----	455.	-----	317.	-----	68.
	-----	176.	-----	174.	-----	9.	-----
	0.3	-----	367.	-----	107.	-----	3.
	-----	125.	-----	125.	-----	6.	-----
	0.2	-----	349.	-----	320.	-----	12.
	-----	99.	-----	98.	-----	3.	-----
	0.2	-----	311.	-----	306.	-----	48.
	-----	127.	-----	77.	-----	2.	-----
	10.5	-----	343.	-----	275.	-----	71.
	-----	303.	-----	77.	-----	4.	-----
	5.0	-----	469.	-----	350.	-----	123.
	-----	394.	-----	136.	-----	7.	-----
	4.5	-----	492.	-----	387.	-----	152.
	-----	418.	-----	180.	-----	9.	-----
	3.5	-----	491.	-----	383.	-----	144.

7

AFF-111

RJ-5, VARIABLE FUEL
1981 AUGUST 6,7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		BSCAT 10-4 M-1 MRI-388	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	PART/CC TSI-023	PART/CC TSI-023	AER.N PART/CC TSI-023	AER.N PART/CC TSI-023	AER.V UM3/CC TSI-023
1 605	-175	0.0	0.0	1.	1.	-913.	-913.			
1 725	-95	-----	-----	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.0	-----	4.	-----	1.9E 04	-----	-----	14	-----
1 845	-15	-----	0.1	-----	2.	-----	4.1E 04	-----	-----	---
1 1005	65	8.7	-----	40.	-----	4.4E 04	-----	-----	116	-----
1 1015	75	-----	4.7	-----	34.	-----	4.5E 04	-----	-----	---
1 1105	125	19.0	-----	54.	-----	4.8E 04	-----	-----	139	-----
1 1115	135	-----	10.0	-----	34.	-----	4.8E 04	-----	-----	153
1 1205	185	31.0	-----	64.	-----	4.3E 04	-----	-----	153	-----
1 1215	195	-----	17.0	-----	26.	-----	4.5E 04	-----	-----	---
1 1305	245	49.0	-----	61.	-----	5.3E 04	-----	-----	155	-----
1 1315	255	-----	27.0	-----	62.	-----	3.9E 04	-----	-----	---
1 1405	305	62.0	-----	46.	-----	7.8E 04	-----	-----	144	-----
1 1415	315	-----	35.0	-----	40.	-----	5.3E 04	-----	-----	---
1 1505	365	73.0	-----	100.	-----	4.7E 04	-----	-----	179	-----
1 1515	375	-----	42.0	-----	38.	-----	3.1E 04	-----	-----	---
1 1605	425	80.0	-----	62.	-----	6.5E 04	-----	-----	151	-----
1 1615	435	-----	44.0	-----	27.	-----	3.3E 04	-----	-----	---
2 835	1415	34.0	-----	6.	-----	862.	-----	-----	5	-----
2 845	1425	-----	7.0	-----	9.	-----	3784.	-----	-----	---
2 1005	1505	3.6	-----	51.	-----	9.2E 04	-----	-----	164	-----
2 1015	1515	-----	7.8	-----	8.	-----	1555.	-----	-----	---
2 1105	1565	6.2	-----	63.	-----	7.7E 04	-----	-----	201	-----
2 1115	1575	-----	7.8	-----	11.	-----	-104.	-----	-----	---
2 1205	1625	14.0	-----	96.	-----	8.4E 04	-----	-----	225	-----
2 1215	1635	-----	11.0	-----	10.	-----	4436.	-----	-----	---
2 1305	1685	23.0	-----	79.	-----	4.1E 04	-----	-----	213	-----
2 1315	1695	-----	32.0	-----	34.	-----	1.8E 04	-----	-----	---
2 1405	1745	15.0	-----	78.	-----	4.3E 04	-----	-----	201	-----
2 1415	1755	-----	50.0	-----	42.	-----	2.0E 04	-----	-----	---
2 1505	1805	32.0	-----	58.	-----	3.3E 04	-----	-----	162	-----
2 1515	1815	-----	49.0	-----	47.	-----	1.7E 04	-----	-----	---

----- NO DATA TAKEN

532

12 NOV 1981

PAGE 5

	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 RJ-5(A) PPMC VAR 3700	SIDE 2 RJ-5(A) PPMC VAR 3700
1.	-913.	-913.	9.	9.	-----	-----
2.	1.9E 04	-----	144.	-----	1.166	0.527 A
3.	4.4E 04	4.1E 04	-----	218.	-----	-----
4.	4.8E 04	4.5E 04	-----	1169.	1.692	-----
5.	4.8E 04	4.5E 04	-----	1045.	-----	-----
6.	4.3E 04	4.8E 04	-----	1391.	-----	-----
7.	5.3E 04	4.5E 04	-----	1093.	-----	1.059
8.	7.8E 04	3.9E 04	-----	1532.	1.120	-----
9.	5.3E 04	3.9E 04	-----	1033.	-----	-----
10.	4.7E 04	4.7E 04	-----	1556.	-----	-----
11.	3.1E 04	4.7E 04	-----	1337.	-----	1.099
12.	6.5E 04	3.1E 04	-----	1449.	-----	-----
13.	3.3E 04	6.5E 04	-----	1202.	-----	-----
14.	862.	3.3E 04	-----	1794.	1.005 A	-----
15.	3784.	862.	-----	1111.	-----	-----
16.	9.2E 04	3784.	-----	1516.	-----	-----
17.	1555.	9.2E 04	-----	937.	-----	0.555
18.	7.7E 04	1555.	-----	51.	-----	-----
19.	104.	7.7E 04	-----	154.	-----	-----
20.	8.4E 04	104.	-----	1641.	-----	-----
21.	4436.	8.4E 04	-----	139.	-----	-----
22.	4.1E 04	4436.	-----	2010.	-----	-----
23.	1.8E 04	4.1E 04	-----	-104.	-----	0.994
24.	4.3E 04	1.8E 04	-----	2254.	1.400	-----
25.	2.0E 04	4.3E 04	-----	2137.	-----	-----
26.	3.3E 04	2.0E 04	-----	2015.	1.560	-----
27.	1.7E 04	3.3E 04	-----	1127.	-----	-----
				1629.	-----	-----
				1101.	-----	0.677

2

AFF-111
RJ-5, VARIABLE FUEL
1981 AUGUST 6,7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SI H PI
		RJ-5(B) PPMC VAR 3700	RJ-5(B) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	PAN PPM ECD-3	PAN PPM ECD-3	PAN PPM ECD-3	PAN PPM ECD-3					
1 605	-175	-----	-----	-----	-----	-----	0.000	0.000	-----	-----	-----	-----		
1 725	-95	-----	1.137 A	-----	4.412 A	-----	-----	-----	-----	-----	-----	-----		
1 835	-25	2.130	-----	8.709	-----	-----	-----	-----	-----	-----	-----	0		
1 845	-15	-----	-----	-----	-----	-----	-----	-----	-----	0.000	-----	-----		
1 1005	65	2.228	-----	8.773	-----	-----	0.001	-----	-----	-----	-----	-----		
1 1015	75	-----	-----	-----	-----	-----	-----	-----	-----	0.000	-----	-----		
1 1105	125	-----	-----	-----	-----	-----	0.001	-----	-----	-----	-----	-----		
1 1115	135	-----	1.459	-----	5.630	-----	0.001	-----	-----	0.001	-----	-----		
1 1200	180	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0		
1 1205	185	2.042	-----	8.004	-----	-----	0.001	-----	-----	-----	-----	-----		
1 1215	195	-----	-----	-----	-----	-----	-----	-----	-----	0.000	-----	-----		
1 1305	245	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1315	255	-----	1.501	-----	5.779	-----	0.000	-----	-----	-----	-----	-----		
1 1405	305	-----	-----	-----	-----	-----	0.001	-----	-----	-----	-----	-----		
1 1415	315	-----	-----	-----	-----	-----	-----	-----	-----	0.000	-----	-----		
1 1505	365	1.685 A	-----	6.746 A	-----	-----	0.001	-----	-----	-----	-----	-----		
1 1515	375	-----	-----	-----	-----	-----	-----	-----	-----	0.000	-----	-----		
1 1605	425	-----	-----	-----	-----	-----	0.000	-----	-----	-----	-----	-----		
1 1610	430	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.	-----		
1 1615	435	-----	1.090	-----	3.882	-----	0.000	-----	-----	-----	-----	-----		
533	2 810	1390	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.	
	2 835	1415	-----	-----	-----	-----	0.001	-----	-----	-----	-----	-----	-----	
	2 845	1425	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
	2 1005	1505	-----	-----	-----	-----	0.001	-----	-----	-----	-----	-----	-----	
	2 1015	1515	-----	-----	-----	-----	-----	-----	-----	0.001	-----	-----	-----	
	2 1105	1565	-----	-----	-----	-----	0.001	-----	-----	-----	-----	-----	-----	
	2 1115	1575	-----	1.288	-----	4.241	-----	0.001	-----	-----	-----	-----	-----	
	2 1200	1620	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.	
	2 1205	1625	1.771	-----	5.895	-----	0.002	-----	-----	-----	-----	-----	-----	
	2 1215	1635	-----	-----	-----	-----	-----	-----	-----	0.001	-----	-----	-----	
	2 1305	1685	-----	-----	-----	-----	0.002	-----	-----	-----	-----	-----	-----	
	2 1315	1695	-----	-----	-----	-----	-----	-----	-----	0.001	-----	-----	-----	
	2 1405	1745	2.057	-----	6.775	-----	0.001	-----	-----	-----	-----	-----	-----	
	2 1415	1755	-----	-----	-----	-----	-----	-----	-----	0.002	-----	-----	-----	
	2 1505	1805	-----	-----	-----	-----	-----	-----	-----	0.002	-----	-----	-----	
	2 1510	1810	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.	
	2 1515	1815	-----	1.274	-----	3.837	-----	0.002	-----	-----	-----	-----	-----	

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	PAN	PAN	HCHO	HCHO	PART.024	PART.024
	PPM	PPM	PPM	PPM	PART/CC	PART/CC
00	ECD-3	ECD-3	CA	CA	TSI-023	TSI-023
	0.000	0.000	-----	-----	-1336.	-1336.
A	-----	-----	-----	-----	-----	-----
	-----	-----	0.021	0.006	1.2E 04	-----
	-----	0.000	-----	-----	-----	2.5E 04
	0.001	-----	-----	-----	2.0E 04	-----
	-----	0.000	-----	-----	-----	1.7E 04
	0.001	-----	-----	-----	2.5E 04	-----
	-----	0.001	-----	-----	-----	2.3E 04
	-----	-----	0.017	0.015	-----	-----
	0.001	-----	-----	-----	2.4E 04	-----
	-----	0.000	-----	-----	-----	2.2E 04
	-----	-----	-----	-----	3.2E 04	-----
	-----	0.000	-----	-----	-----	1.9E 04
	0.001	-----	-----	-----	4.7E 04	-----
	-----	0.000	-----	-----	-----	3.4E 04
	0.001	-----	-----	-----	3.4E 04	-----
	-----	0.000	-----	-----	-----	1.8E 04
	0.000	-----	-----	-----	4.6E 04	-----
	-----	-----	0.038	0.025	-----	-----
	-----	0.000	-----	-----	-----	2.1E 04
	-----	-----	0.008	0.004	-----	-----
	0.001	-----	-----	-----	501.	-----
	-----	-----	-----	-----	-----	2505.
	0.001	-----	-----	-----	2.2E 04	-----
	-----	0.001	-----	-----	-----	1002.
	0.001	-----	-----	-----	1.9E 04	-----
	-----	0.001	-----	-----	-----	-1837.
	-----	-----	0.010	0.006	-----	-----
	0.002	-----	-----	-----	8350.	-----
	-----	0.001	-----	-----	-----	668.
	0.002	-----	-----	-----	1169.	-----
	-----	0.001	-----	-----	-----	5845.
	0.001	-----	-----	-----	1.0E 04	-----
	-----	0.002	-----	-----	-----	5344.
	0.002	-----	-----	-----	9185.	-----
	-----	-----	0.017	0.013	-----	-----
	-----	0.002	-----	-----	-----	5010.

2

AFF-111
RJ-5, VARIABLE FUEL
1981 AUGUST 6,7

CLOCK DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1						
		PART.042 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023
1 605	-175	609.	609.	-266.	-266.	72.	72.	-1		
1 835	-25	4437.	-----	2131.	-----	241.	-----	4		
1 845	-15	-----	8787.	-----	6127.	-----	289.	---		
1 1005	65	1305.	-----	1.2E 04	-----	9447.	-----	113		
1 1015	75	-----	1305.	-----	1.9E 04	-----	7302.	---		
1 1105	125	870.	-----	9013.	-----	1.1E 04	-----	166		
1 1115	135	-----	870.	-----	1.4E 04	-----	8989.	---		
1 1205	185	0.	-----	4484.	-----	1.2E 04	-----	216		
1 1215	195	-----	1566.	-----	1.0E 04	-----	1.0E 04	---		
1 1305	245	261.	-----	4840.	-----	1.3E 04	-----	146		
1 1315	255	-----	957.	-----	7459.	-----	8772.	---		
1 1405	305	2088.	-----	1.8E 04	-----	8339.	-----	206		
1 1415	315	-----	1392.	-----	6127.	-----	1.0E 04	---		
1 1505	365	87.	-----	533.	-----	8652.	-----	333		
1 1515	375	-----	-2088.	-----	2975.	-----	1.0E 04	---		
1 1605	425	87.	-----	6394.	-----	8314.	-----	306		
1 1615	435	-----	0.	-----	755.	-----	9327.	---		
2 835	1415	87.	-----	488.	-----	-289.	-----	2		
2 845	1425	-----	174.	-----	44.	-----	747.	---		
2 1005	1505	2.7E 04	-----	3.4E 04	-----	7158.	-----	105		
2 1015	1515	-----	-174.	-----	-311.	-----	675.	---		
2 1105	1565	6525.	-----	3.7E 04	-----	1.2E 04	-----	187		
2 1115	1575	-----	783.	-----	266.	-----	506.	---		
2 1205	1625	5.7E 04	-----	710.	-----	1.5E 04	-----	193		
2 1215	1635	-----	1392.	-----	311.	-----	1566.	---		
2 1305	1685	1566.	-----	1.8E 04	-----	1.8E 04	-----	205		
2 1315	1695	-----	696.	-----	3596.	-----	6194.	---		
2 1405	1745	1305.	-----	1.1E 04	-----	1.7E 04	-----	257		
2 1415	1755	-----	348.	-----	2486.	-----	9423.	---		
2 1505	1805	783.	-----	5994.	-----	1.4E 04	-----	266		
2 1515	1815	-----	348.	-----	1243.	-----	7375.	---		

----- NO DATA TAKEN

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
75	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
C	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	72.	72.	-12.	-12.	20.	20.
	241.	-----	49.	-----	67.	-----
	-----	289.	-----	0.	-----	0.
	9447.	-----	1132.	-----	180.	-----
04	-----	7302.	-----	701.	-----	67.
	1.1E 04	-----	1660.	-----	273.	-----
04	-----	8989.	-----	886.	-----	133.
	1.2E 04	-----	2165.	-----	400.	-----
04	-----	1.0E 04	-----	984.	-----	107.
	1.3E 04	-----	1464.	-----	574.	-----
	-----	8772.	-----	2029.	-----	140.
	8339.	-----	2066.	-----	280.	-----
	-----	1.0E 04	-----	1734.	-----	153.
	8652.	-----	3333.	-----	507.	-----
	-----	1.0E 04	-----	1697.	-----	307.
	8314.	-----	3001.	-----	380.	-----
	-----	9327.	-----	1968.	-----	40.
	-289.	-----	37.	-----	13.	-----
	-----	747.	-----	246.	-----	47.
	7158.	-----	1058.	-----	213.	-----
	-----	675.	-----	295.	-----	53.
	1.2E 04	-----	1870.	-----	220.	-----
	-----	506.	-----	49.	-----	100.
	1.5E 04	-----	1931.	-----	1014.	-----
	-----	1566.	-----	467.	-----	13.
	1.8E 04	-----	2054.	-----	587.	-----
	-----	6194.	-----	1636.	-----	133.
	1.7E 04	-----	2571.	-----	380.	-----
	-----	9423.	-----	2005.	-----	253.
	1.4E 04	-----	2681.	-----	360.	-----
	-----	7375.	-----	2300.	-----	320.

2

AFF-111
RJ-5, VARIABLE FUEL
1981 AUGUST 6,7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2
		PART,750 PART/CC TSI-023	PART,750 PART/CC TSI-023
1 605	-175	0.	0.
1 835	-25	0.	-----
1 845	-15	-----	0.
1 1005	65	46.	-----
1 1015	75	-----	60.
1 1105	125	74.	-----
1 1115	135	-----	39.
1 1205	185	77.	-----
1 1215	195	-----	0.
1 1305	245	49.	-----
1 1315	255	-----	137.
1 1405	305	28.	-----
1 1415	315	-----	32.
1 1505	365	211.	-----
1 1515	375	-----	4.
1 1605	425	67.	-----
1 1615	435	-----	0.
2 835	1415	25.	-----
2 845	1425	-----	21.
2 1005	1505	81.	-----
2 1015	1515	-----	14.
2 1105	1565	81.	-----
2 1115	1575	-----	28.
2 1205	1625	102.	-----
2 1215	1635	-----	18.
2 1305	1685	74.	-----
2 1315	1695	-----	42.
2 1405	1745	98.	-----
2 1415	1755	-----	18.
2 1505	1805	32.	-----
2 1515	1815	-----	42.

----- NO DATA TAKEN

NOTES

- A PRESSURE ROSE ON COLUMN FLOW REGULATOR SO R.T.'S ARE OFF,
B UNRELIABLE, BECKMAN HAD A 'NOISE' PROBLEM.

535

AFF-112

PROPENE - NOX CONDITIONING
1981 AUGUST 10

NOTE: N-BUTANE AND N-PENTANE ALSO INJECTED TO DETERMINE
BUTYL AND PENTYL NITRATE YIELDS.

0647: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 18.2
DRY BULB: 29.8 R.H.: 32% DEW POINT: 10.8
0757: END FILL.
0821: INJECTED 11.0 ML. NO₂.
0823: INJECTED 12.0 ML. NO.
0825: INJECTED 48.0 ML. N-BUTANE.
0827: INJECTED 19.2 ML. PROPENE.
0830: INJECTED 225 MICROLITERS N-PENTANE.
0836: MIX BAG.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HOT.
1410: RUN OVER, SAMPLING ENDED.

T=0 AT 900 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	36.4	4.2	DEG C
UV RAD	EPPLEY-2	2.72	0.49	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.223	PPM
NO ₂ -UNC	B-NOX-1	0.200	PPM
THC	BK6800-1	14.30	PPMC
PROPENE	DMS-1	0.4141	PPM
N-C5	VA1400-7	1.0708	PPM
N-C4	VA1400-7	1.1178	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1400	VA1400-7	RM-121; C20-M/DC-703 GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1790	D-1790	DASIBI 1790 OZONE MONITOR
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-308	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143

536

AFF-112
 PROPENE - NOX CONDITIONING
 1981 AUGUST 10

CLOCK	ELAPSED	OZONE	NO	NO2-UNC	NOX-UNC	THC	PROPENE	
TIME	TIME	PPM	PPM	PPM	PPM	PPMC	PPM	F
DY	HR.	(MIN)	D-1700	B-NOX-1	B-NOX-1	RK6800-1	DMS-1	VA1
1	845	-15	0.000	0.223	0.200	0.449	14.30	0.4141
1	905	5	-----	-----	-----	-----	-----	1.
1	1005	65	0.027	0.092	0.321	0.432	13.90	-----
1	1105	125	0.205	0.010	0.374	0.389	14.00	-----
1	1205	185	0.574	0.008	0.318	0.325	12.70	-----
1	1305	245	0.822	0.005	0.271	0.278	12.90	-----
1	1405	305	0.935	0.005	0.238	0.242	12.70	-----
CLOCK	ELAPSED	#PART>.5	#PART>1	BSCAT	AER.V	AER.N	AER.S	N-
TIME	TIME	PART/CC	PART/CC	10-4 M-1	UM3/CC	PART/CC	UM2/CC	PP
DY	HR.	(MIN)	CLIMET	CLIMET	MRI-388	TSI-023	TSI-023	VA1
1	845	-15	0.	0.	0.0	4.	-270.	40.
1	905	5	-----	-----	-----	-----	-----	1.
1	1005	65	0.	0.	0.1	5.	9725.	119.
1	1105	125	0.	0.	1.2	7.	1.0E 04	223.
1	1205	185	1.	0.	5.3	8.	1.2E 04	304.
1	1305	245	11.	0.	7.2	18.	1.1E 04	340.
1	1405	305	47.	0.	7.2	10.	1.2E 04	261.
CLOCK	ELAPSED	RJ-5(B)	RJ-5'(C)	PAN	PART.024	PART.042	PART.075	PART
TIME	TIME	PPMC	PPMC	PPM	PART/CC	PART/CC	PART/CC	PART
DY	HR.	(MIN)	VAR 3700	VAR 3700	ECD-3	TSI-023	TSI-023	TSI-023
1	845	-15	2.1E 05A	7.2E 05A	0.000	-835.	261.	222.
1	1005	65	-----	-----	0.001	2338.	4872.	2220.
1	1105	125	-----	-----	0.018	1002.	783.	8347.
1	1205	185	-----	-----	0.068	2171.	87.	6882.
1	1305	245	-----	-----	0.121	1336.	435.	7237.
1	1405	305	-----	-----	0.146	5511.	87.	3552.

----- NO DATA TAKEN

NOTES

A 30% RESIDUE

12 NOV 1981

PAGE 2

NC	THC PPMC	PROPENE PPM	N-C5 PPM	T DEG C	UV RAD MW/CM2	CONDENS 10E3/CC	*PART>.3 PART/CC CLIMET
-1	BK6800-1	DMS-1	VA1400-7	DORIC-1	EPPLEY-2	CNC-143	
49	14.30	0.4141	1.071	28.7	-----	0.0	0.
--	-----	-----	1.066	-----	-----	-----	-----
32	13.90	-----	1.040	34.6	2.00	2.8	0.
89	14.00	-----	1.002	37.1	3.37	2.6	0.
25	12.70	-----	0.9385	38.6	2.86	2.0	105.
78	12.90	-----	0.2836	39.4	2.77	1.6	100.
42	12.70	-----	0.8549	39.9	2.59	1.1	278.
V	AER.N PART/CC	AER.S UM2/CC	N-C4 PPM	2-C40N03 RAW DATA	3-C50N02 RAW DATA	2-C50N02 RAW DATA	RJ-5(A) PPMC
CC	PART/CC	UM2/CC	PPM	RAW DATA	RAW DATA	RAW DATA	PPMC
23	TSI-023	TSI-023	VA1400-7	10'C-600	10'C-600	10'C-600	VAR 3700
.	-270.	40.	1.118	0.0000	0.0000	0.0000	1.8E 03A
--	-----	-----	1.113	0.0000	0.0000	0.0000	-----
.	9725.	119.	1.077	0.0003	0.0006	0.0010	-----
.	1.0E 04	223.	1.023	0.0017	0.0021	0.0042	-----
.	1.2E 04	304.	0.9460	0.0042	0.0039	0.0066	-----
.	1.1E 04	340.	0.8935	0.0058	0.0058	0.0094	-----
.	1.2E 04	261.	0.8712	0.0081	0.0065	0.0105	-----
024	PART.042	PART.075	PART.133	PART.237	PART.422	PART.750	
CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	
.	261.	222.	24.	37.	7.	14.	
.	4872.	2220.	217.	74.	-13.	18.	
.	783.	8347.	217.	98.	27.	14.	
.	87.	6882.	2217.	160.	13.	11.	
.	435.	7237.	1904.	25.	-60.	74.	
.	87.	3552.	2338.	12.	33.	21.	

2

AFF-113

RJ-5 VS. JP-10
1981 AUGUST 11

DAY 1 (AUGUST 11)

0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 13.4
DRY BULB: 19.7 R.H.=49% DEW POINT: 8.5
0555: END FILL.
0626: INJECTED 5.0 ML. NO₂.
0628: INJECTED 18.0 ML. NO.
0630: MIX AND DIVIDE BAG.
0638: INJECTED 270 MICROLITERS RJ-5 INTO SIDE A AT 250
DEGREES C FOR 30 MINUTES.
0656: INJECTED 312 MICROLITERS JP-10 INTO SIDE B USING
HEAT GUN FOR 15 MINUTES.
0712: MIX SIDE A, SIDE B.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HOT.
1620: END SAMPLING, DAY 1.
DAY 2 (AUGUST 12)
0900: UNCOVER BAG, DAY 2.
0905: WEATHER: SUNNY AND HAZY.
1520: END SAMPLING.

RESULTS	DAY 1	DAY 2
AVG. T (DEG. C)	37 (+-3)	34 (+-3)
AVG. UV (MW/CM ²)	2.5 (+-0.9)	2.9 (+-0.6)

T=0 AT 900 PST

538 BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	33.6	6.0	DEG C
T	DORIC-1	33.9	5.7	DEG C
UV RAD	EPPLEY-2	2.66	0.74	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.348	PPM	SIDE 1
NO	B-NOX-1	0.351	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.110	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.111	PPM	SIDE 2
THC	BK6800-1	16.80	PPMC	SIDE 1
THC	BK6800-1	30.80	PPMC	SIDE 2

AFF-113
RJ-5 VS. JP-10
1981 AUGUST 11

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAF. GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	RENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12% 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
4850	BK6800-1	RECKMAN CO, HC ANALYZER SN:100015D
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-113

RJ-5 VS. JP-10
1981 AUGUST 11

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-1 PPM B-NOX-1
1 605	-175	0.001	0.001	0.000	0.000	0.001	0.001	0.001
1 835	-25	0.003	-----	0.348	-----	0.110	-----	0.001
1 845	-15	-----	0.000	-----	0.351	-----	0.111	-----
1 1005	65	0.005	-----	0.298	-----	0.142	-----	0.001
1 1015	75	-----	0.008	-----	0.311	-----	0.150	-----
1 1105	125	0.008	-----	0.256	-----	0.172	-----	0.001
1 1115	135	-----	0.011	-----	0.277	-----	0.170	-----
1 1205	185	0.012	-----	0.207	-----	0.208	-----	0.001
1 1215	195	-----	0.006	-----	0.239	-----	0.200	-----
1 1305	245	0.012	-----	0.158	-----	0.241	-----	0.001
1 1315	255	-----	0.006	-----	0.198	-----	0.230	-----
1 1405	305	0.018	-----	0.112	-----	0.276	-----	0.001
1 1415	315	-----	0.007	-----	0.169	-----	0.253	-----
1 1505	365	0.023	-----	0.082	-----	0.291	-----	0.001
1 1515	375	-----	0.008	-----	0.147	-----	0.270	-----
1 1605	425	0.022	-----	0.062	-----	0.307	-----	0.001
1 1615	435	-----	0.003	-----	0.132	-----	0.282	-----
<hr/>								
2 835	1415	0.005	-----	0.023	-----	0.330	-----	0.001
2 845	1425	-----	0.000	-----	0.112	-----	0.291	-----
2 1005	1505	0.055	-----	0.038	-----	0.298	-----	0.001
2 1015	1515	-----	0.022	-----	0.098	-----	0.301	-----
2 1105	1565	0.076	-----	0.030	-----	0.292	-----	0.001
2 1115	1575	-----	0.030	-----	0.077	-----	0.312	-----
2 1205	1625	0.114	-----	0.018	-----	0.280	-----	0.001
2 1215	1635	-----	0.040	-----	0.058	-----	0.329	-----
2 1305	1685	0.168	-----	0.007	-----	0.256	-----	0.001
2 1315	1695	-----	0.057	-----	0.039	-----	0.343	-----
2 1405	1745	0.255	-----	0.001	-----	0.207	-----	0.001
2 1415	1755	-----	0.076	-----	0.022	-----	0.300	-----
2 1505	1805	0.357	-----	0.000	-----	0.131	-----	0.001
2 1515	1815	-----	0.094	-----	0.015	-----	0.343	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0.001	0.001	0.001	0.001	3.28	3.28
0.110	-----	0.466	-----	16.80	-----
0.111	-----	0.472	-----	30.80	-----
0.142	-----	0.451	-----	12.70	-----
0.150	-----	0.469	-----	30.80	-----
0.172	-----	0.442	-----	14.60	-----
0.170	-----	0.460	-----	30.80	-----
0.208	-----	0.431	-----	13.10	-----
0.200	-----	0.455	-----	29.00	-----
0.241	-----	0.417	-----	13.90	-----
0.230	-----	0.448	-----	30.80	-----
0.273	-----	0.401	-----	13.70	-----
0.253	-----	0.441	-----	29.90	-----
0.291	-----	0.382	-----	13.00	-----
0.270	-----	0.432	-----	29.90	-----
0.307	-----	0.374	-----	14.50	-----
0.282	-----	0.430	-----	29.00	-----
0.330	-----	0.357	-----	12.30	-----
0.291	-----	0.422	-----	29.90	-----
0.298	-----	0.333	-----	12.70	-----
0.301	-----	0.410	-----	29.90	-----
0.292	-----	0.320	-----	10.90	-----
0.312	-----	0.400	-----	29.00	-----
0.280	-----	0.297	-----	12.40	-----
0.329	-----	0.393	-----	28.10	-----
0.256	-----	0.262	-----	13.40	-----
0.343	-----	0.388	-----	29.90	-----
0.207	-----	0.210	-----	12.60	-----
0.300	-----	0.324	-----	29.90	-----
0.131	-----	0.131	-----	12.20	-----
0.343	-----	0.361	-----	29.90	-----

2

AFF-113
RJ-5 VS. JP-10
1981 AUGUST 11

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2	SIDE 1	SIDE 2	SIDE 1	SIDE 1
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC	CONDENS 10E3/CC	*PART>.3 PART/CC	*PAF PART CLIMET
1 605	-175	19.8	19.8	-----	0.0	0.0	0.	---
1 835	-25	26.7	-----	-----	17.2	-----	0.	---
1 845	-15	-----	28.2	-----	-----	0.1	-----	---
1 1005	65	31.4	-----	1.91	13.8	-----	0.	---
1 1015	75	-----	33.1	2.36	-----	0.0	-----	1
1 1105	125	36.3	-----	3.64	10.8	-----	14.	---
1 1115	135	-----	36.9	3.64	-----	0.0	-----	12
1 1205	185	38.5	-----	2.91	9.6	-----	169.	---
1 1215	195	-----	39.0	3.55	-----	0.0	-----	17
1 1305	245	40.1	-----	3.19	7.8	-----	340.	---
1 1315	255	-----	40.1	2.73	-----	0.0	-----	15
1 1405	305	38.4	-----	2.63	6.1	-----	408.	---
1 1415	315	-----	38.3	2.50	-----	0.0	-----	13
1 1505	365	37.4	-----	1.82	4.4	-----	423.	---
1 1515	375	-----	36.0	1.82	-----	0.0	-----	10
1 1605	425	33.7	-----	1.14	3.2	-----	429.	---
1 1615	435	-----	32.7	1.05	-----	0.0	-----	8
2 835	1415	23.3	-----	-----	0.1	-----	127.	---
2 845	1425	-----	24.0	-----	-----	0.0	-----	---
2 1005	1505	29.4	-----	2.09	0.8	-----	282.	---
2 1015	1515	-----	30.5	2.41	-----	0.0	-----	---
2 1105	1565	32.6	-----	3.28	0.6	-----	387.	---
2 1115	1575	-----	33.8	3.37	-----	0.0	-----	---
2 1205	1625	35.1	-----	2.86	0.5	-----	462.	---
2 1215	1635	-----	36.2	3.28	-----	0.0	-----	---
2 1305	1685	37.3	-----	3.55	0.4	-----	417.	---
2 1315	1695	-----	37.0	3.46	-----	0.0	-----	---
2 1405	1745	39.0	-----	2.91	0.7	-----	346.	---
2 1415	1755	-----	38.3	2.77	-----	0.0	-----	---
2 1505	1805	38.0	-----	2.18	3.9	-----	427.	---
2 1515	1815	-----	38.0	2.09	-----	0.0	-----	1

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART<.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.	0.	0.	0.	0.	0.
-----	0.	-----	0.	-----	0.	-----
0.1	-----	0.	-----	0.	-----	0.
-----	0.	-----	0.	-----	0.	-----
0.0	-----	13.	-----	0.	-----	0.
-----	14.	-----	-----	0.	-----	-----
0.0	-----	129.	-----	6.	-----	0.
-----	169.	-----	4.	-----	0.	-----
0.0	-----	172.	-----	19.	-----	0.
-----	340.	-----	67.	-----	0.	-----
0.0	-----	158.	-----	57.	-----	0.
-----	408.	-----	175.	-----	5.	-----
0.0	-----	136.	-----	118.	-----	2.
-----	423.	-----	224.	-----	17.	-----
0.0	-----	109.	-----	106.	-----	4.
-----	429.	-----	248.	-----	28.	-----
0.0	-----	85.	-----	84.	-----	3.
-----	127.	-----	12.	-----	0.	-----
0.0	-----	3.	-----	3.	-----	0.
-----	282.	-----	108.	-----	4.	-----
0.0	-----	4.	-----	2.	-----	-----
-----	387.	-----	187.	-----	15.	-----
0.0	-----	4.	-----	3.	-----	1.
-----	462.	-----	221.	-----	31.	-----
0.0	-----	3.	-----	3.	-----	1.
-----	417.	-----	385.	-----	71.	-----
0.0	-----	4.	-----	3.	-----	1.
-----	346.	-----	353.	-----	69.	-----
0.0	-----	9.	-----	5.	-----	1.
-----	427.	-----	322.	-----	101.	-----
0.0	-----	18.	-----	11.	-----	2.

2

AFF-113
RJ-5 VS. JP-10
1981 AUGUST 11

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT MRI-388	SIDE 2 BSCAT MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER. UM2/ TSI-0
1 605	-175	0.0	0.0	1.	1.	680.	680.	10
1 725	-95	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.0	-----	3.	-----	2.2E 04	-----	108
1 845	-15	-----	0.0	-----	2.	-----	115.	-----
1 1005	65	2.7	-----	30.	-----	4.3E 04	-----	917
1 1015	75	-----	0.7	-----	3.	-----	1168.	-----
1 1105	125	6.2	-----	24.	-----	3.8E 04	-----	936
1 1115	135	-----	1.6	-----	6.	-----	1259.	-----
1 1205	185	12.0	-----	30.	-----	3.4E 04	-----	1031
1 1215	195	-----	2.2	-----	3.	-----	1282.	-----
1 1305	245	20.0	-----	41.	-----	2.8E 04	-----	1106
1 1315	255	-----	2.6	-----	3.	-----	877.	-----
1 1405	305	26.0	-----	39.	-----	2.6E 04	-----	1098
1 1415	315	-----	2.5	-----	4.	-----	1589.	-----
1 1505	365	28.0	-----	37.	-----	2.2E 04	-----	964
1 1515	375	-----	2.0	-----	4.	-----	1002.	-----
1 1605	425	27.5	-----	31.	-----	1.7E 04	-----	802
1 1615	435	-----	1.5	-----	1.	-----	954.	-----
2 725	1345	-----	-----	-----	-----	-----	-----	-----
2 835	1415	1.8	-----	7.	-----	3241.	-----	76
2 845	1425	-----	0.2	-----	2.	-----	-5.	-----
2 1005	1505	7.1	-----	8.	-----	5893.	-----	210
2 1015	1515	-----	0.3	-----	0.	-----	-1292.	-----
2 1105	1565	12.0	-----	9.	-----	6617.	-----	233
2 1115	1575	-----	0.2	-----	0.	-----	895.	-----
2 1205	1625	13.0	-----	16.	-----	5772.	-----	281
2 1215	1635	-----	0.2	-----	2.	-----	-499.	-----
2 1305	1685	11.0	-----	10.	-----	3369.	-----	213
2 1315	1695	-----	0.1	-----	0.	-----	188.	-----
2 1405	1745	9.6	-----	13.	-----	3388.	-----	222
2 1415	1755	-----	0.2	-----	1.	-----	19.	-----
2 1505	1805	23.0	-----	23.	-----	1.9E 04	-----	617
2 1515	1815	-----	0.3	-----	1.	-----	569.	-----

----- NO DATA TAKEN

542

12 NOV 1981
PAGE 5

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 2 JP-10 PPM VAR 3700	SIDE 1 RJ-5(A) PPMC VAR 3700	SIDE 1 RJ-5(B) PPMC VAR 3700
680.	680.	10.	10.	-----	0.186	0.209
-----	-----	-----	-----	-----	0.522	1.012
2.2E 04	-----	108.	-----	-----	-----	-----
-----	115.	-----	21.	2.508	-----	-----
4.3E 04	-----	917.	-----	-----	0.727	0.984
-----	1168.	-----	60.	-----	-----	-----
3.8E 04	-----	936.	-----	-----	-----	-----
-----	1259.	-----	73.	2.397	-----	-----
3.4E 04	-----	1031.	-----	-----	0.433	0.847
-----	1282.	-----	61.	-----	-----	-----
2.8E 04	-----	1106.	-----	-----	-----	-----
-----	877.	-----	55.	2.497	-----	-----
2.6E 04	-----	1098.	-----	-----	-----	-----
-----	1589.	-----	66.	-----	-----	-----
2.2E 04	-----	964.	-----	-----	0.625	1.013
-----	1002.	-----	51.	-----	-----	-----
1.7E 04	-----	802.	-----	-----	-----	-----
-----	954.	-----	26.	2.224	-----	-----
-----	-----	-----	-----	-----	0.554	0.732
3241.	-----	76.	-----	-----	-----	-----
-----	-5.	-----	29.	2.322	-----	-----
5893.	-----	210.	-----	-----	0.624	0.909
-----	-1292.	-----	4.	-----	-----	-----
6617.	-----	233.	-----	-----	-----	-----
-----	895.	-----	4.	2.240	-----	-----
5772.	-----	281.	-----	-----	0.469	0.662
-----	-499.	-----	20.	-----	-----	-----
3369.	-----	213.	-----	-----	-----	-----
-----	188.	-----	6.	2.362	-----	-----
3388.	-----	222.	-----	-----	0.487	0.675
-----	19.	-----	17.	-----	-----	-----
1.9E 04	-----	617.	-----	-----	-----	-----
-----	569.	-----	15.	2.290	-----	-----

2

AFF-113
 RJ-5 VS. JP-10
 1981 AUGUST 11

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 RJ-5(C) PPMC VAR 3700	SIDE 1 PAN PPM	SIDE 2 PAN PPM	SIDE 1 HCHO PPM	SIDE 2 HCHO PPM	SIDE 1 PART.024 PART/CC TSI-023	SIDE 1 PART PART TSI-
			ECD-3	ECD-3	CA	CA		
1 605	-175	0.654	0.000	0.000	-----	-----	334.	33
1 725	-95	3.741	-----	-----	-----	-----	-----	---
1 810	-50	-----	-----	-----	0.019	0.013	-----	---
1 835	-25	-----	0.000	-----	-----	-----	1.7E 04	---
1 845	-15	-----	-----	0.000	-----	-----	-----	16
1 1005	65	3.732	-----	-----	-----	-----	1.2E 04	---
1 1015	75	-----	-----	0.000	-----	-----	-----	33
1 1105	125	-----	0.001	-----	-----	-----	1.3E 04	---
1 1115	135	-----	-----	-----	-----	-----	-----	33
1 1200	180	-----	-----	-----	0.008	0.013	-----	---
1 1205	185	3.094	0.001	-----	-----	-----	1.1E 04	---
1 1215	195	-----	-----	-----	-----	-----	-----	66
1 1305	245	-----	0.000	-----	-----	-----	1.1E 04	---
1 1315	255	-----	-----	0.001	-----	-----	-----	---
1 1405	305	-----	0.001	-----	-----	-----	1.1E 04	---
1 1415	315	-----	-----	0.001	-----	-----	-----	50
1 1505	365	3.332	0.001	-----	-----	-----	7515.	---
1 1515	375	-----	-----	0.001	-----	-----	-----	33
1 1605	425	-----	0.002	-----	-----	-----	4509.	---
1 1610	430	-----	-----	-----	0.017	0.006	-----	---
1 1615	435	-----	-----	0.001	-----	-----	-----	16
2 725	1345	2.401	-----	-----	-----	-----	-----	---
2 810	1390	-----	-----	-----	0.008	0.004	-----	---
2 835	1415	-----	0.000	-----	-----	-----	1670.	---
2 845	1425	-----	-----	0.000	-----	-----	-----	16
2 1005	1505	3.183	0.001	-----	-----	-----	3340.	---
2 1015	1515	-----	-----	0.000	-----	-----	-----	-150
2 1105	1565	-----	0.002	-----	-----	-----	3340.	---
2 1115	1575	-----	-----	0.001	-----	-----	-----	50
2 1200	1620	-----	-----	-----	0.010	0.006	-----	---
2 1205	1625	2.089	0.002	-----	-----	-----	2839.	---
2 1215	1635	-----	-----	0.001	-----	-----	-----	-66
2 1305	1685	-----	0.002	-----	-----	-----	1169.	---
2 1315	1695	-----	-----	0.001	-----	-----	-----	-16
2 1405	1745	2.013	0.003	-----	-----	-----	1169.	---
2 1415	1755	-----	-----	0.001	-----	-----	-----	-16
2 1505	1805	-----	0.004	-----	-----	-----	8684.	---
2 1510	1810	-----	-----	-----	0.015	0.008	-----	---
2 1515	1815	-----	-----	0.002	-----	-----	-----	50

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
HCHO	PART.024	PART.024	PART.042	PART.042	PART.075	PART.075
PPM	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
CA	TSI-023	TST-023	TSI-023	TSI-023	TSI-023	TSI-023
-----	334.	334.	435.	435.	0.	0.
-----	-----	-----	-----	-----	-----	-----
0.013	-----	-----	-----	-----	-----	-----
-----	1.7E 04	-----	3132.	-----	1465.	-----
-----	-----	167.	-----	174.	-----	-266.
-----	1.2E 04	-----	6873.	-----	1.8E 04	-----
-----	-----	334.	-----	609.	-----	0.
-----	1.3E 04	-----	435.	-----	1.5E 04	-----
-----	-----	334.	-----	174.	-----	355.
0.013	-----	-----	-----	-----	-----	-----
-----	1.1E 04	-----	696.	-----	1.2E 04	-----
-----	-----	668.	-----	-261.	-----	266.
-----	1.1E 04	-----	0.	-----	6260.	-----
-----	-----	0.	-----	261.	-----	89.
-----	1.1E 04	-----	-1218.	-----	4884.	-----
-----	-----	501.	-----	348.	-----	355.
-----	7515.	-----	783.	-----	3152.	-----
-----	-----	334.	-----	435.	-----	0.
-----	4509.	-----	2175.	-----	2398.	-----
0.006	-----	-----	-----	-----	-----	-----
-----	-----	167.	-----	0.	-----	710.
-----	-----	-----	-----	-----	-----	-----
0.004	-----	-----	-----	-----	-----	-----
-----	1670.	-----	783.	-----	400.	-----
-----	-----	167.	-----	-87.	-----	-133.
-----	3340.	-----	0.	-----	799.	-----
-----	-----	-1503.	-----	0.	-----	89.
-----	3340.	-----	261.	-----	710.	-----
-----	-----	501.	-----	435.	-----	-89.
0.006	-----	-----	-----	-----	-----	-----
-----	2839.	-----	522.	-----	355.	-----
-----	-----	-668.	-----	0.	-----	89.
-----	1169.	-----	522.	-----	133.	-----
-----	-----	-167.	-----	174.	-----	133.
-----	1169.	-----	261.	-----	577.	-----
-----	-----	-167.	-----	0.	-----	133.
-----	8684.	-----	87.	-----	4040.	-----
0.008	-----	-----	-----	-----	-----	-----
-----	-----	501.	-----	0.	-----	0.

J

AFF-113

RJ-5 VS. JP-10
1981 AUGUST 11

	CLOCK	ELAPSED TIME	SIDE 1 PART.133 TSI-023	SIDE 2 PART.133 TSI-023	SIDE 1 PART.237 TSI-023	SIDE 2 PART.237 TSI-023	SIDE 1 PART.422 TSI-023	SIDE 2 PART.422 TSI-023	SIDE 1 PART.750 TSI-023	SIDE 2 PART.750 TSI-023
	BY HR.	(MIN)								
1	605	-175	-96.	-96.	0.	0.	0.	0.	7.	7.
1	835	-25	289.	-----	0.	-----	0.	-----	11.	-----
1	845	-15	-----	24.	-----	-37.	-----	53.	-----	0.
1	1005	65	5230.	-----	455.	-----	133.	-----	49.	-----
1	1015	75	-----	120.	-----	25.	-----	80.	-----	0.
1	1105	125	7784.	-----	775.	-----	87.	-----	11.	-----
1	1115	135	-----	313.	-----	61.	-----	0.	-----	21.
1	1205	185	9182.	-----	1033.	-----	153.	-----	14.	-----
1	1215	195	-----	506.	-----	86.	-----	13.	-----	4.
1	1305	245	9809.	-----	1341.	-----	193.	-----	49.	-----
1	1315	255	-----	434.	-----	86.	-----	0.	-----	7.
1	1405	305	1.0E 04	-----	1611.	-----	160.	-----	39.	-----
1	1415	315	-----	313.	-----	25.	-----	40.	-----	7.
1	1505	365	8604.	-----	1525.	-----	80.	-----	56.	-----
1	1515	375	-----	169.	-----	37.	-----	13.	-----	14.
1	1605	425	6628.	-----	1255.	-----	180.	-----	28.	-----
1	1615	435	-----	48.	-----	25.	-----	0.	-----	4.
2	835	1415	337.	-----	86.	-----	-73.	-----	39.	-----
2	845	1425	-----	0.	-----	-12.	-----	60.	-----	0.
2	1005	1505	1205.	-----	492.	-----	53.	-----	4.	-----
2	1015	1515	-----	145.	-----	-12.	-----	-13.	-----	4.
2	1105	1565	1759.	-----	529.	-----	7.	-----	11.	-----
2	1115	1575	-----	48.	-----	0.	-----	0.	-----	0.
2	1205	1625	1350.	-----	664.	-----	0.	-----	42.	-----
2	1215	1635	-----	48.	-----	25.	-----	0.	-----	7.
2	1305	1685	940.	-----	504.	-----	93.	-----	7.	-----
2	1315	1695	-----	48.	-----	0.	-----	0.	-----	0.
2	1405	1745	916.	-----	357.	-----	80.	-----	28.	-----
2	1415	1755	-----	0.	-----	49.	-----	0.	-----	4.
2	1505	1805	5230.	-----	898.	-----	33.	-----	35.	-----
2	1515	1815	-----	48.	-----	0.	-----	20.	-----	0.

----- NO DATA TAKEN

AFF-114
JP-10 VS RJ-5
1981 AUGUST 13

DAY 1 (AUGUST 13)

0435: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 15.2
DRY BULB: 22.0 R.H.=48% DEW POINT: 10.4
0540: END FILL.
0622: INJECTED 5.0 ML. NO2.
0624: INJECTED 18.0 ML. NO.
0628: MIX AND DIVIDE BAG.
0638: INJECTED 270 MICROLITERS RJ-5 INTO
SIDE B AT 250 DEGREES C FOR 30 MIN.
0655: INJECTED 312 MICROLITERS JP-10 INTO
SIDE A USING HEAT GUN FOR 15 MIN.
0713: MIX SIDE A, SIDE B.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HOT.
1630: BAG COVERED.

DAY 2 (AUGUST 14)

0900: UNCOVER BAG, DAY 2.
0905: WEATHER: SUNNY AND HAZY.
1520: END RUN.

RESULTS	DAY 1	DAY 2
AVG. T (DEG. C)	36 (+-3)	39 (+-2)
AVG. UV (MW/CM2)	2.5 (+-0.8)	2.6 (+-0.6)

T=0 AT 900 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	35.1	5.8	DEG C
T	DORIC-1	35.4	5.4	DEG C
UV RAD	EPPLEY-2	2.53	0.69	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.338	PPM
NO	B-NOX-1	0.336	PPM
NO2-UNC	B-NOX-1	0.109	PPM
NO2-UNC	B-NOX-1	0.107	PPM
THC	BK6800-1	30.80	PPMC
THC	BK6800-1	14.80	PPMC

545

AFF-114

JP-10 VS RJ-5
1981 AUGUST 13

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143

AFF-114
 JP-10 VS RJ-5
 1981 AUGUST 13

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX- PP
1 600	-180	0.001	0.001	0.000	0.000	0.000	0.000	0.
1 835	-25	0.002	-----	0.338	-----	0.109	-----	0.
1 845	-15	-----	0.004	-----	0.336	-----	0.107	-----
1 1005	65	0.002	-----	0.300	-----	0.142	-----	0.
1 1015	75	-----	0.009	-----	0.266	-----	0.150	-----
1 1105	125	0.006	-----	0.268	-----	0.169	-----	0.
1 1115	135	-----	0.010	-----	0.225	-----	0.183	-----
1 1205	185	0.006	-----	0.229	-----	0.191	-----	0.
1 1215	195	-----	0.012	-----	0.177	-----	0.213	-----
1 1305	245	0.010	-----	0.192	-----	0.222	-----	0.
1 1315	255	-----	0.014	-----	0.130	-----	0.248	-----
1 1405	305	0.012	-----	0.154	-----	0.252	-----	0.
1 1415	315	-----	0.020	-----	0.091	-----	0.272	-----
1 1505	365	0.012	-----	0.127	-----	0.270	-----	0.
1 1515	375	-----	0.024	-----	0.068	-----	0.291	-----
1 1605	425	0.012	-----	0.111	-----	0.290	-----	0.
1 1615	435	-----	0.027	-----	0.048	-----	0.300	---
2 835	1415	0.000	-----	0.090	-----	0.303	-----	0.
2 845	1425	-----	0.005	-----	0.015	-----	0.327	---
2 1005	1505	0.031	-----	0.068	-----	0.317	-----	0.
2 1015	1515	-----	0.084	-----	0.027	-----	0.290	---
2 1105	1565	0.056	-----	0.042	-----	0.330	-----	0.
2 1115	1575	-----	0.137	-----	0.011	-----	0.269	---
2 1205	1625	0.090	-----	0.025	-----	0.341	-----	0.
2 1215	1635	-----	0.235	-----	0.002	-----	0.220	---
2 1305	1685	0.131	-----	0.012	-----	0.336	-----	0.
2 1315	1695	-----	0.371	-----	0.000	-----	0.137	---
2 1405	1745	0.177	-----	0.004	-----	0.318	-----	0.
2 1415	1755	-----	0.431	-----	0.000	-----	0.052	---
2 1505	1805	0.217	-----	0.001	-----	0.307	-----	0.
2 1515	1815	-----	0.420	-----	0.000	-----	0.031	---

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BN6800-1	SIDE 2 THC PPMC BNJ800-1
00	0.000	0.000	0.000	0.000	3.13	3.13
--	0.109	-----	0.456	-----	30.80	-----
36	-----	0.107	-----	0.450	-----	14.80
--	0.142	-----	0.451	-----	30.80	-----
66	-----	0.150	-----	0.430	-----	14.60
--	0.169	-----	0.450	-----	29.90	-----
25	-----	0.183	-----	0.421	-----	14.60
--	0.191	-----	0.436	-----	29.90	-----
77	-----	0.213	-----	0.407	-----	13.90
--	0.222	-----	0.432	-----	29.90	-----
30	-----	0.248	-----	0.392	-----	13.40
--	0.252	-----	0.427	-----	29.90	-----
91	-----	0.272	-----	0.377	-----	13.10
--	0.270	-----	0.417	-----	30.80	-----
68	-----	0.291	-----	0.366	-----	14.80
--	0.290	-----	0.417	-----	29.00	-----
48	-----	0.300	-----	0.351	-----	14.20
--	0.303	-----	0.408	-----	29.00	-----
015	-----	0.327	-----	0.342	-----	12.70
--	0.317	-----	0.392	-----	28.10	-----
027	-----	0.290	-----	0.316	-----	13.50
--	0.330	-----	0.379	-----	27.20	-----
011	-----	0.269	-----	0.281	-----	12.70
--	0.341	-----	0.369	-----	27.20	-----
002	-----	0.220	-----	0.226	-----	13.60
--	0.336	-----	0.350	-----	27.20	-----
000	-----	0.137	-----	0.138	-----	11.80
--	0.318	-----	0.328	-----	26.30	-----
000	-----	0.052	-----	0.052	-----	11.80
--	0.307	-----	0.311	-----	26.30	-----
000	-----	0.031	-----	0.029	-----	12.00

2

AFF-114
 JP-10 VS RJ-5
 1981 AUGUST 13

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	UV RAD MW/CM2 EPFLEY-2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		T DEG C DORIC-1	T DEG C DORIC-1		CONDENS 10E3/CC CNC-143	CONVENS 10E3/CC CNC-143	*PARTN.3 PART/CC CLIMET	*PART PART/CLIM
1 600	-180	21.2	21.2	-----	0.0	0.0	0.	0
1 635	-25	25.3	-----	-----	0.0	-----	0.	-----
1 845	-15	-----	27.0	-----	-----	17.1	-----	0
1 1005	65	29.7	-----	2.09	0.8	-----	1.	-----
1 1015	75	-----	31.5	2.54	-----	13.0	-----	1
1 1105	125	33.4	-----	3.46	0.4	-----	62.	-----
1 1115	135	-----	34.8	3.55	-----	10.0	-----	67
1 1205	185	37.5	-----	3.00	0.3	-----	192.	-----
1 1215	195	-----	36.7	3.46	-----	8.4	-----	245
1 1305	245	38.1	-----	2.91	0.4	-----	290.	-----
1 1315	255	-----	39.3	2.82	-----	6.8	-----	362
1 1405	305	39.4	-----	2.54	0.3	-----	357.	-----
1 1415	315	-----	37.8	2.45	-----	5.4	-----	410
1 1505	365	37.1	-----	1.91	0.1	-----	341.	-----
1 1515	375	-----	36.1	1.77	-----	4.0	-----	425
1 1605	425	34.9	-----	1.18	10.1	-----	287.	-----
1 1615	435	-----	34.1	1.14	-----	3.0	-----	429
2 835	1415	30.6	-----	-----	0.0	-----	10.	-----
2 845	1425	-----	31.7	-----	-----	0.0	-----	183
2 1005	1505	34.6	-----	1.91	0.0	-----	58.	-----
2 1015	1515	-----	37.8	2.54	-----	0.2	-----	367
2 1105	1565	38.6	-----	3.37	0.0	-----	51.	-----
2 1115	1575	-----	40.1	3.37	-----	0.1	-----	401
2 1205	1625	41.3	-----	2.73	0.0	-----	39.	-----
2 1215	1635	-----	40.7	3.00	-----	0.6	-----	359
2 1305	1685	40.1	-----	2.91	0.0	-----	33.	-----
2 1315	1695	-----	40.4	2.91	-----	4.7	-----	453
2 1405	1745	40.4	-----	2.50	0.0	-----	43.	-----
2 1415	1755	-----	39.4	2.41	-----	5.2	-----	493
2 1505	1805	39.0	-----	1.73	0.0	-----	61.	-----
2 1515	1815	-----	38.2	1.64	-----	3.8	-----	490

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

	SIDE 2 CONDENS 10E3/CC 2NC-143	SIDE 1 #PART>,3 PART/CC CLIMET	SIDE 2 #PAR1>,3 PART/CC CLIMET	SIDE 1 #PART>,5 PART/CC CLIMET	SIDE 2 #PART>,5 PART/CE CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0	0.0	0.	0.	0.	0.	0.	0.
0	-----	0.	-----	0.	-----	0.	-----
--	17.1	-----	0.	-----	0.	-----	0.
8	-----	1.	-----	0.	-----	0.	-----
--	13.0	-----	1.	-----	0.	-----	0.
4	-----	62.	-----	0.	-----	0.	-----
--	10.0	-----	67.	-----	0.	-----	0.
3	-----	192.	-----	17.	-----	0.	-----
--	8.4	-----	245.	-----	17.	-----	0.
4	-----	290.	-----	62.	-----	0.	-----
--	6.8	-----	362.	-----	97.	-----	1.
3	-----	357.	-----	95.	-----	2.	-----
--	5.4	-----	410.	-----	186.	-----	8.
1	-----	341.	-----	91.	-----	3.	-----
--	4.0	-----	425.	-----	232.	-----	19.
1	-----	287.	-----	97.	-----	3.	-----
--	3.0	-----	429.	-----	249.	-----	28.
0	-----	10.	-----	4.	-----	0.	-----
--	0.0	-----	183.	-----	19.	-----	0.
0	-----	58.	-----	20.	-----	0.	-----
--	0.2	-----	367.	-----	189.	-----	14.
0	-----	51.	-----	49.	-----	3.	-----
--	0.1	-----	401.	-----	276.	-----	42.
0	-----	39.	-----	37.	-----	11.	-----
--	0.6	-----	359.	-----	354.	-----	69.
0	-----	33.	-----	26.	-----	20.	-----
--	4.7	-----	453.	-----	346.	-----	112.
0	-----	43.	-----	29.	-----	12.	-----
--	5.2	-----	493.	-----	388.	-----	149.
0	-----	61.	-----	40.	-----	8.	-----
--	3.8	-----	490.	-----	381.	-----	140.

2

AFF-114
 JP-10 VS RJ-5
 1981 AUGUST 13

CLOCK BY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT MRI-388	SIDE 2 BSCAT MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER. TSI-
1 600	-180	0.2	0.2	0.	0.	403.	403.	
1 725	-95	-----	-----	-----	-----	-----	-----	
1 835	-25	0.1	-----	2.	-----	-956.	-----	2.
1 845	-15	-----	0.1	-----	2.	-----	2.6E 04	---
1 1005	65	1.0	-----	3.	-----	5377.	-----	11.
1 1015	75	-----	4.6	-----	21.	-----	3.7E 04	---
1 1105	125	2.5	-----	6.	-----	4069.	-----	14.
1 1115	135	-----	8.1	-----	23.	-----	3.8E 04	---
1 1205	185	4.2	-----	8.	-----	4809.	-----	16.
1 1215	195	-----	14.0	-----	29.	-----	3.1E 04	---
1 1305	245	6.0	-----	7.	-----	3771.	-----	16.
1 1315	255	-----	20.0	-----	29.	-----	2.7E 04	---
1 1405	305	7.0	-----	10.	-----	4176.	-----	17.
1 1415	315	-----	25.0	-----	20.	-----	1.9E 04	---
1 1505	365	7.0	-----	5.	-----	3167.	-----	13.
1 1515	375	-----	28.0	-----	35.	-----	1.6E 04	---
1 1605	425	5.0	-----	6.	-----	1655.	-----	8.
1 1615	435	-----	27.0	-----	24.	-----	2.0E 04	---
2 730	1350	-----	-----	-----	-----	-----	-----	---
2 835	1415	0.2	-----	2.	-----	781.	-----	2.
2 845	1425	-----	2.2	-----	2.	-----	432.	---
2 1005	1505	1.0	-----	2.	-----	739.	-----	3.
2 1015	1515	-----	8.0	-----	8.	-----	-590.	---
2 1105	1565	1.0	-----	2.	-----	853.	-----	3.
2 1115	1575	-----	9.5	-----	6.	-----	3442.	---
2 1105	1625	1.0	-----	2.	-----	706.	-----	20.
2 1215	1635	-----	9.6	-----	14.	-----	3494.	---
2 1305	1685	1.1	-----	1.	-----	1442.	-----	2.
2 1315	1695	-----	28.0	-----	22.	-----	2.1E 04	---
2 1405	1745	0.8	-----	6.	-----	-869.	-----	5.
2 1415	1755	-----	50.0	-----	60.	-----	2.1E 04	---
2 1505	1805	0.9	-----	1.	-----	1034.	-----	40.
2 1515	1815	-----	48.0	-----	50.	-----	2.1E 04	---

----- NO DATA TAKEN

549

12 NOV 1981
PAGE 5

	SIDE 1 AER,N PART/CC TSI-023	SIDE 2 AER,N PART/CC TSI-023	SIDE 1 AER,S UM2/CC TSI-023	SIDE 2 AER,S UM2/CC TSI-023	SIDE 1 JP-10 PPM VAR 3700	SIDE 2 RJ-5(A) PPMC VAR 3700	SIDE 2 RJ-5(B) PPMC VAR 3700
	403.	403.	3.	3.	-----	-----	-----
	-----	-----	-----	-----	2.043	-----	-----
	-956.	-----	29.	-----	-----	-----	-----
	-----	2.6E 04	-----	159.	-----	0.683	0.924
	5377.	-----	119.	-----	2.341	-----	-----
	-----	3.7E 04	-----	832.	-----	-----	-----
	4069.	-----	142.	-----	-----	-----	-----
	-----	3.8E 04	-----	843.	-----	0.772	1.087
	4809.	-----	163.	-----	2.248	-----	-----
	-----	3.1E 04	-----	915.	-----	-----	-----
	3771.	-----	166.	-----	-----	-----	-----
	-----	2.7E 04	-----	887.	-----	0.504	0.725
	4176.	-----	179.	-----	-----	-----	-----
	-----	1.9E 04	-----	750.	-----	-----	-----
	3167.	-----	130.	-----	2.299	-----	-----
	-----	1.6E 04	-----	815.	-----	-----	-----
	1655.	-----	87.	-----	-----	-----	-----
	-----	2.0E 04	-----	713.	-----	0.629	0.893
	-----	-----	-----	-----	2.215	-----	-----
	781.	-----	21.	-----	-----	-----	-----
	-----	432.	-----	47.	-----	0.710	0.980
	739.	-----	34.	-----	2.165	-----	-----
	-----	-590.	-----	153.	-----	-----	-----
	853.	-----	32.	-----	-----	-----	-----
	-----	3442.	-----	155.	-----	0.710	1.003
	708.	-----	20.	-----	2.106	-----	-----
	-----	3494.	-----	234.	-----	-----	-----
	1442.	-----	22.	-----	-----	-----	-----
	-----	2.1E 04	-----	700.	-----	-----	-----
	-869.	-----	53.	-----	1.967	-----	-----
	-----	2.1E 04	-----	1212.	-----	-----	-----
	1034.	-----	40.	-----	-----	-----	-----
	-----	2.1E 04	-----	1035.	-----	0.533	0.763

AFF-114
 JP-10 VS RJ-5
 1981 AUGUST 13

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 2 RJ-5(C) PPMC VAR 3700	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 1	SIDE
			PAN PPM ECD-3	PAN PPM ECD-3	HCHO PPM CA	HCHO PPM CA	PART.024 PART/CC TSI-023	PART. PART/ TSI-0	
1 600	-180	-----	0.000	0.000	-----	-----	334.	334	
1 810	-50	-----	-----	-----	0.002	0.000	-----	-----	
1 835	-25	-----	0.000	-----	-----	-----	-835.	-----	
1 845	-15	3.481	-----	0.000	-----	-----	-----	1.6E	
1 1005	65	-----	0.000	-----	-----	-----	2505.	-----	
1 1015	75	-----	-----	0.000	-----	-----	-----	1.3E	
1 1105	125	-----	0.000	-----	-----	-----	334.	-----	
1 1115	135	4.183	-----	0.000	-----	-----	-----	1.3E	
1 1200	180	-----	-----	-----	0.006	0.002	-----	-----	
1 1205	185	-----	0.001	-----	-----	-----	3006.	-----	
1 1215	195	-----	-----	0.001	-----	-----	-----	1.3E	
1 1305	245	-----	0.001	-----	-----	-----	2004.	-----	
1 1315	255	2.358	-----	0.001	-----	-----	-----	1.0E	
1 1405	305	-----	0.000	-----	-----	-----	2171.	-----	
1 1415	315	-----	-----	0.000	-----	-----	-----	3340	
1 1505	365	-----	0.002	-----	-----	-----	1670.	-----	
1 1515	375	-----	-----	0.001	-----	-----	-----	5511	
1 1605	425	-----	0.001	-----	-----	-----	1503.	-----	
1 1610	430	-----	-----	-----	0.013	0.004	-----	-----	
1 1615	435	3.229	-----	0.000	-----	-----	-----	7849	
550	2 810	1390	-----	-----	0.017	0.008	-----	-----	
	2 835	1415	-----	0.000	-----	-----	501.	-----	
	2 845	1425	3.568	-----	0.000	-----	-----	0	
	2 1005	1505	-----	0.000	-----	-----	167.	-----	
	2 1015	1515	-----	-----	0.001	-----	-----	2505	
	2 1105	1565	-----	0.001	-----	-----	668.	-----	
	2 1115	1575	3.380	-----	0.000	-----	-----	2004	
	2 1200	1620	-----	-----	0.019	0.004	-----	-----	
	2 1205	1625	-----	0.001	-----	-----	501.	-----	
	2 1215	1635	-----	-----	0.001	-----	-----	1503	
	2 1305	1685	-----	0.001	-----	-----	1002.	-----	
	2 1315	1695	-----	-----	0.001	-----	-----	8517	
	2 1405	1745	-----	0.001	-----	-----	-334.	-----	
	2 1415	1755	-----	-----	0.002	-----	-----	9519	
	2 1505	1805	-----	0.002	-----	-----	167.	-----	
	2 1510	1810	-----	-----	0.013	0.006	-----	-----	
	2 1515	1815	2.057	-----	0.002	-----	-----	1.0E	

----- NO DATA TAKEN

12 NOV 1981

PAGE 6

	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023
	-----	334.	334.	0.	0.	44.	44.
2	0.000	-----	-----	-----	-----	-----	-----
4	-----	-835.	-----	-87.	-----	-178.	-----
4	-----	-----	1.6E 04	-----	6003.	-----	3064.
4	-----	2505.	-----	1044.	-----	666.	-----
4	-----	-----	1.3E 04	-----	2523.	-----	1.4E 04
4	-----	334.	-----	870.	-----	1687.	-----
4	-----	-----	1.3E 04	-----	6351.	-----	1.2E 04
6	0.002	-----	-----	-----	-----	-----	-----
4	-----	3006.	-----	-174.	-----	533.	-----
4	-----	-----	1.3E 04	-----	87.	-----	8347.
4	-----	2004.	-----	0.	-----	355.	-----
4	-----	-----	1.0E 04	-----	174.	-----	6793.
4	-----	2171.	-----	522.	-----	178.	-----
4	-----	-----	3340.	-----	0.	-----	5905.
4	-----	1670.	-----	348.	-----	89.	-----
4	-----	-----	5511.	-----	-87.	-----	1998.
3	0.004	-----	-----	-609.	-----	311.	-----
4	-----	-----	-----	-----	-----	-----	-----
4	-----	-----	7849.	-----	174.	-----	4396.
7	0.008	-----	-----	-----	-----	-----	-----
4	-----	501.	-----	348.	-----	-89.	-----
4	-----	-----	0.	-----	87.	-----	44.
4	-----	167.	-----	435.	-----	-89.	-----
4	-----	-----	-2505.	-----	-696.	-----	1243.
4	-----	668.	-----	0.	-----	0.	-----
19	0.004	-----	-----	-----	-----	-----	-----
4	-----	2004.	-----	0.	-----	0.	89.
4	-----	501.	-----	87.	-----	89.	-----
4	-----	-----	1503.	-----	261.	-----	266.
4	-----	1002.	-----	261.	-----	44.	-----
4	-----	-----	8517.	-----	1305.	-----	4618.
4	-----	-334.	-----	-783.	-----	266.	-----
4	-----	-----	9519.	-----	261.	-----	1421.
4	-----	167.	-----	609.	-----	-89.	-----
13	0.006	-----	-----	-----	-----	-----	-----
4	-----	-----	1.0E 04	-----	783.	-----	1998.

J

AFF-114
JP-10 VS RJ-5
1981 AUGUST 13

CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2						
TIME	TIME	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750	PART/CC	PART/CC
DY	HR.	(MIN)	TSI-023	TSI-023	TSI-023						
1	600	-180	24.	24.	0.	0.	0.	0.	0.	0.	0.
1	835	-25	72.	-----	25.	-----	47.	-----	0.	0.	-----
1	845	-15	-----	482.	-----	49.	-----	13.	-----	0.	0.
1	1005	65	940.	-----	209.	-----	13.	-----	0.	0.	-----
1	1015	75	-----	6411.	-----	615.	-----	133.	-----	4.	-----
1	1105	125	1036.	-----	111.	-----	20.	-----	11.	-----	-----
1	1115	135	-----	6579.	-----	603.	-----	193.	-----	0.	-----
1	1205	185	1181.	-----	209.	-----	40.	-----	14.	-----	-----
1	1215	195	-----	8049.	-----	886.	-----	207.	-----	14.	-----
1	1305	245	1060.	-----	258.	-----	93.	-----	0.	-----	-----
1	1315	255	-----	8748.	-----	886.	-----	100.	-----	28.	-----
1	1405	305	892.	-----	369.	-----	20.	-----	25.	-----	-----
1	1415	315	-----	8941.	-----	640.	-----	20.	-----	11.	-----
1	1505	365	651.	-----	369.	-----	40.	-----	0.	-----	-----
1	1515	375	-----	7110.	-----	1328.	-----	20.	-----	74.	-----
1	1605	425	313.	-----	86.	-----	33.	-----	18.	-----	-----
1	1615	435	-----	6676.	-----	922.	-----	67.	-----	28.	-----
2	835	1415	0.	-----	0.	-----	13.	-----	7.	-----	-----
2	845	1425	-----	120.	-----	160.	-----	20.	-----	0.	-----
2	1005	1505	193.	-----	12.	-----	13.	-----	7.	-----	-----
2	1015	1515	-----	1133.	-----	234.	-----	-27.	-----	28.	-----
2	1105	1565	145.	-----	0.	-----	40.	-----	0.	-----	-----
2	1115	1575	-----	843.	-----	492.	-----	7.	-----	7.	-----
2	1205	1625	-48.	-----	86.	-----	-13.	-----	7.	-----	-----
2	1215	1635	-----	964.	-----	381.	-----	87.	-----	32.	-----
2	1305	1685	48.	-----	86.	-----	0.	-----	0.	-----	-----
2	1315	1695	-----	5808.	-----	1046.	-----	160.	-----	0.	-----
2	1405	1745	-169.	-----	123.	-----	7.	-----	21.	-----	-----
2	1415	1755	-----	7037.	-----	2448.	-----	320.	-----	95.	-----
2	1505	1805	217.	-----	123.	-----	7.	-----	0.	-----	-----
2	1515	1815	-----	6194.	-----	1660.	-----	387.	-----	70.	-----

----- NO DATA TAKEN

NOTES

A LESS THAN 100 ML. SAMPLE, PROBABLY 98 ML., 80 OFF "2-5%

AFF-115
PROPENE - NOX CONDITIONING
1981 AUGUST 17

0630: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 15.2
DRY BULB: 27.8 R.H.=24% DEW POINT: 4.4
0750: END FILL.
0803: INJECTED 11.0 ML. NO₂.
0805: INJECTED 12.0 ML. NO.
0807: INJECTED 22.5 ML. PROPENE.
0810: MIX BAG.
0900: UNCOVER BAG (T=0).
0905: WEATHER: CLEAR AND SUNNY.
1400: RUN OVER, BAG DUMPED.

T=0 AT 900 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	34.5	9.2	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479

552

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO ₂ -UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1
1 850	-10	0.004	0.186	0.174	0.372	28.0
1 1400	300	0.660	0.001	0.202	0.208	41.0

----- NO DATA TAKEN

AFF-116
RJ-5 VS. N-BUTANE
1981 AUGUST 18

0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 14.3
DRY BULB: 21.5 R.H.=45% DEW POINT: 8.7
0556: END FILL.
0631: INJECTED 5.0 ML. NO₂.
0633: INJECTED 18.0 ML. NO.
0636: MIX AND DIVIDE BAG.
0644: INJECTED 270 MICROLITERS RJ-5 AT 250
DEGREES C FOR 30 MINUTES INTO SIDE A.
0650: INJECTED 125 ML. N-BUTANE INTO SIDE B.
0655: MIX SIDE B.
0717: MIX SIDE A.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HAZY.
1620: RUN OVER.

T=0 AT 900 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	31.5	5.7	DEG C SIDE 1
T	DORIC-1	31.7	5.6	DEG C SIDE 2
UV RAD	EPPELEY-2	2.35	0.69	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.354	PPM SIDE 1
NO	B-NOX-1	0.354	PPM SIDE 2
NO ₂ -UNC	B-NOX-1	0.109	PPM SIDE 1
NO ₂ -UNC	B-NOX-1	0.109	PPM SIDE 2
THC	BK6800-1	12.60	PPMC SIDE 1
THC	BK6800-1	28.30	PPMC SIDE 2
N-C4	VA1400-7	5.4740	PPM SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR:SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR:SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1400	VA1400-7	RM-121; C20-M/DC-703 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPELEY-2	EPPELEY 14290 UV RADIOMETER; UNDER BAG
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD

AFF-116
RJ-5 VS. N-BUTANE
1981 AUGUST 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX-L PPM
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.0
1 835	-25	0.000	-----	0.354	-----	0.109	-----	0.4
1 845	-15	-----	0.000	-----	0.354	-----	0.109	-----
1 1005	65	0.004	-----	0.297	-----	0.143	-----	0.4
1 1015	75	-----	0.001	-----	0.258	-----	0.191	-----
1 1105	125	0.004	-----	0.257	-----	0.170	-----	0.4
1 1115	135	-----	0.006	-----	0.189	-----	0.255	-----
1 1205	135	0.007	-----	0.212	-----	0.199	-----	0.4
1 1215	195	-----	0.016	-----	0.121	-----	0.318	-----
1 1305	245	0.011	-----	0.167	-----	0.229	-----	0.4
1 1315	255	-----	0.033	-----	0.063	-----	0.375	-----
1 1405	305	0.015	-----	0.127	-----	0.260	-----	0.4
1 1415	315	-----	0.072	-----	0.031	-----	0.402	-----
1 1505	365	0.019	-----	0.092	-----	0.282	-----	0.3
1 1515	375	-----	0.108	-----	0.015	-----	0.410	-----
1 1605	425	0.020	-----	0.070	-----	0.291	-----	0.3
1 1615	435	-----	0.130	-----	0.010	-----	0.410	-----

----- NO DATA TAKEN

12 NOV 1981

PAGE 2

E 1 UNC M X-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
000	0.000	0.000	0.000	2.51	2.51
109	-----	0.471	-----	12.60	-----
---	0.109	-----	0.473	-----	28.30
143	-----	0.453	-----	14.80	-----
---	0.191	-----	0.470	-----	29.80
170	-----	0.441	-----	14.60	-----
---	0.255	-----	0.468	-----	29.10
199	-----	0.430	-----	14.10	-----
---	0.318	-----	0.459	-----	29.80
229	-----	0.413	-----	13.00	-----
---	0.375	-----	0.450	-----	28.30
260	-----	0.402	-----	13.00	-----
---	0.402	-----	0.439	-----	29.10
282	-----	0.389	-----	12.60	-----
---	0.410	-----	0.430	-----	29.10
291	-----	0.371	-----	12.60	-----
---	0.410	-----	0.421	-----	29.10

2

AFF-116
 RJ-5 VS. N-BUTANE
 1981 AUGUST 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 2	SIDE 2	SIDE 1	SIDE 2	UV RAD	SIDE 1	SIDE 1
		N-C4 PPM	N-C4 PPM	T DEG C	T DEG C	MW/CM2	CONDENS 10E3/CC	CON 10E CNC
		VA1400-7	DMS-1	DORIC-1	DORIC-1	EPPLEY-2	CNC-143	
1 605	-175	-----	0.0008	20.7	20.7	-----	0.0	0.0
1 745	-75	5.474	6.361	-----	-----	-----	-----	-----
1 835	-25	-----	-----	24.7	-----	-----	12.7	-----
1 845	-15	-----	-----	-----	24.7	-----	-----	-----
1 1005	65	-----	-----	28.7	-----	2.09	10.0	-----
1 1015	75	5.391	-----	-----	30.6	2.41	-----	-----
1 1105	125	-----	-----	32.0	-----	2.82	8.8	-----
1 1115	135	5.340	-----	-----	32.8	2.73	-----	-----
1 1205	185	-----	-----	34.1	-----	2.96	7.2	-----
1 1215	195	5.308	-----	-----	35.2	3.05	-----	-----
1 1305	245	-----	-----	36.9	-----	3.00	5.6	-----
1 1315	255	5.267	-----	-----	36.5	3.00	-----	-----
1 1405	305	-----	-----	36.8	-----	2.59	4.6	-----
1 1415	315	5.215	-----	-----	36.6	2.50	-----	-----
1 1505	365	-----	-----	36.0	-----	1.91	3.6	-----
1 1515	375	5.194	-----	-----	35.6	1.73	-----	-----
1 1605	425	-----	-----	33.3	-----	1.09	3.0	-----
1 1615	435	5.184	5.960	-----	32.8	1.00	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
2	UV RAD	CONDENS	CONDENS	*PART>.3	*PART>.3	*PART>.5
C	MW/CM2	10E3/CC	10E3/CC	PART/CC	PART/CC	PART/CC
-1	EPPLEY-2	CNC-143	CNC-143	CLIMET	CLIMET	CLIMET
2	-----	0.0	0.0	1.	1.	0.
3	-----	-----	-----	-----	-----	-----
4	-----	12.7	-----	0.	-----	0.
5	-----	-----	0.0	-----	0.	-----
6	2.09	10.0	-----	1.	-----	0.
7	2.41	-----	0.0	-----	0.	-----
8	2.82	8.8	-----	79.	-----	0.
9	2.73	-----	0.0	-----	0.	-----
0	2.96	7.2	-----	257.	-----	21.
1	3.05	-----	0.0	-----	0.	-----
2	3.00	5.6	-----	366.	-----	106.
3	3.00	-----	0.0	-----	0.	-----
4	2.59	4.6	-----	410.	-----	193.
5	2.50	-----	0.0	-----	0.	-----
6	1.91	3.6	-----	428.	-----	245.
7	1.73	-----	0.0	-----	1.	-----
8	1.09	3.0	-----	435.	-----	266.
9	1.00	-----	0.0	-----	1.	-----
0	-----	-----	-----	-----	-----	0.

2

AFF-116

RJ-5 VS. N-BUTANE
1981 AUGUST 18

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE PART TSI-
1 605	-175	0.	0.	0.0	0.0	1.	1.	44
1 835	-25	0.	-----	0.2	-----	4.	-----	2.8
1 845	-15	-----	0.	-----	0.2	-----	0.	---
1 1005	65	0.	-----	3.9	-----	19.	-----	4.5
1 1015	75	-----	0.	-----	0.2	-----	3.	---
1 1105	125	0.	-----	7.5	-----	18.	-----	3.0
1 1115	135	-----	0.	-----	0.2	-----	2.	---
1 1205	185	0.	-----	13.0	-----	27.	-----	2.6
1 1215	195	-----	0.	-----	0.2	-----	1.	---
1 1305	245	1.	-----	18.0	-----	25.	-----	2.2
1 1315	255	-----	0.	-----	0.2	-----	2.	---
1 1405	305	9.	-----	23.0	-----	28.	-----	2.4
1 1415	315	-----	0.	-----	0.1	-----	-5.	---
1 1505	365	25.	-----	26.0	-----	24.	-----	2.4
1 1515	375	-----	0.	-----	0.1	-----	2.	---
1 1605	425	36.	-----	28.0	-----	21.	-----	2.1
1 1615	435	-----	0.	-----	0.0	-----	6.	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
AER.V	AER.V	AER.N	AER.N	AER.S	AER.S
UM3/CC	UM3/CC	PART/CC	PART/CC	UM2/CC	UM2/CC
SI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1.	1.	449.	449.	9.	9.
4.	-----	2.8E 04	-----	160.	-----
-----	0.	-----	651.	-----	8.
19.	-----	4.5E 04	-----	795.	-----
-----	3.	-----	483.	-----	29.
18.	-----	3.0E 04	-----	800.	-----
-----	2.	-----	526.	-----	23.
27.	-----	2.6E 04	-----	916.	-----
-----	1.	-----	372.	-----	15.
25.	-----	2.2E 04	-----	883.	-----
-----	2.	-----	609.	-----	15.
28.	-----	2.4E 04	-----	875.	-----
-----	-5.	-----	-3037.	-----	-60.
24.	-----	2.4E 04	-----	801.	-----
-----	2.	-----	-1932.	-----	16.
21.	-----	2.1E 04	-----	705.	-----
-----	6.	-----	1735.	-----	17.

2

AFF-116
 RJ-5 VS. N-BUTANE
 1981 AUGUST 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE PAN PPM ECD-3
		RJ-5(A) PPMC VAR 3700	RJ-5(A) PPMC VAR 3700	RJ-5(B) PPMC VAR 3700	RJ-5(B) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700	RJ-5(C) PPMC VAR 3700					
1 605	-175	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.00	
1 725	-95	0.558	-----	0.795	-----	-----	2.460	-----	-----	-----	-----	-----	-----	
1 810	-50	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 835	-25	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.00	
1 845	-15	-----	0.234	-----	0.322	-----	0.945	-----	-----	-----	-----	-----	-----	
1 1005	65	0.952	-----	1.303	-----	4.987	-----	-----	-----	-----	-----	-----	0.00	
1 1015	75	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1105	125	0.619	-----	1.173	-----	4.277	-----	-----	-----	-----	-----	-----	0.00	
1 1115	135	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1200	180	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1205	185	0.878	-----	1.187	-----	4.086	-----	-----	-----	-----	-----	-----	0.00	
1 1215	195	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1305	245	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.00	
1 1315	255	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1405	305	0.775 A	-----	1.175 A	-----	3.986 A	-----	-----	-----	-----	-----	-----	0.00	
1 1415	315	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1505	365	0.553 B	-----	0.954 B	-----	3.666 B	-----	-----	-----	-----	-----	-----	0.00	
1 1515	375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1605	425	0.508 A	-----	0.707 A	-----	2.314 A	-----	-----	-----	-----	-----	-----	0.00	
1 1610	430	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 1615	435	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	

----- NO DATA TAKEN

557

12 NOV 1981
PAGE 5

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
B)	RJ-5(C)	RJ-5(C)	PAN	PAN	HCHO	HCHO
C	PPMC	PPMC	PPM	PPM	PPM	PPM
700	VAR 3700	VAR 3700	ECD-3	ECD-3	CA	CA
	-----	-----	0.000	0.000	-----	-----
	2.460	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.019	0.004
	-----	-----	0.000	-----	-----	-----
22	-----	0.945	-----	0.000	-----	-----
	4.987	-----	0.000	-----	-----	-----
	-----	-----	-----	0.006	-----	-----
	4.277	-----	0.001	-----	-----	-----
	-----	-----	-----	0.008	-----	-----
	-----	-----	-----	-----	0.017	0.015
	4.086	-----	0.001	-----	-----	-----
	-----	-----	-----	0.013	-----	-----
	-----	-----	0.001	-----	-----	-----
	-----	-----	-----	0.018	-----	-----
	3.986 A	-----	0.001	-----	-----	-----
	-----	-----	-----	0.020	-----	-----
	3.666 B	-----	0.001	-----	-----	-----
	-----	-----	-----	0.024	-----	-----
	2.314 A	-----	0.002	-----	-----	-----
	-----	-----	-----	-----	0.017	0.010
	-----	-----	-----	0.028	-----	-----

AFF-116

RJ-5 VS. N-BUTANE
1981 AUGUST 18

CLOCK DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE PART. TSI-023
1 605	-175	334.	334.	87.	87.	0.	0.	24.
1 835	-25	2.0E 04	-----	4872.	-----	2531.	-----	603.
1 845	-15	-----	167.	-----	435.	-----	0.	-----
1 1005	65	1.4E 04	-----	2610.	-----	2.4E 04	-----	4073.
1 1015	75	-----	334.	-----	87.	-----	0.	-----
1 1105	125	3841.	-----	0.	-----	1.8E 04	-----	7206.
1 1115	135	-----	167.	-----	261.	-----	44.	-----
1 1205	185	3340.	-----	0.	-----	1.4E 04	-----	8339.
1 1215	195	-----	0.	-----	174.	-----	178.	-----
1 1305	245	1336.	-----	261.	-----	9812.	-----	9664.
1 1315	255	-----	167.	-----	435.	-----	0.	-----
1 1405	305	8684.	-----	957.	-----	4396.	-----	8700.
1 1415	315	-----	2672.	-----	-87.	-----	-311.	-----
1 1505	365	1.2E 04	-----	-1322.	-----	4174.	-----	8001.
1 1515	375	-----	-1837.	-----	87.	-----	-222.	-----
1 1605	425	1.1E 04	-----	1044.	-----	1243.	-----	6483.
1 1615	435	-----	0.	-----	2175.	-----	0.	-----

----- NO DATA TAKEN

12 NOV 1981

PAGE 6

S 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
.042	PART.075	PART.075	PART.133	PART.133	PART.237	PART.237
/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
7.	0.	0.	24.	24.	0.	0.
--	2531.	-----	603.	-----	0.	-----
5.	-----	0.	-----	24.	-----	25.
--	2.4E 04	-----	4073.	-----	172.	-----
7.	-----	0.	-----	48.	-----	0.
--	1.8E 04	-----	7206.	-----	234.	-----
1.	-----	44.	-----	0.	-----	37.
--	1.4E 04	-----	8339.	-----	529.	-----
4.	-----	178.	-----	0.	-----	0.
--	9812.	-----	9664.	-----	652.	-----
5.	-----	0.	-----	0.	-----	0.
--	4396.	-----	8700.	-----	1009.	-----
37.	-----	-311.	-----	120.	-----	-37.
--	4174.	-----	8001.	-----	1181.	-----
37.	-----	-222.	-----	0.	-----	0.
--	1243.	-----	6483.	-----	1611.	-----
75.	-----	0.	-----	-265.	-----	-197.

2

AFF-116
RJ-5 VS. N-BUTANE
1981 AUGUST 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
		PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 605	-175	0.	0.	4.	4.
1 835	-25	13.	-----	7.	-----
1 845	-15	-----	0.	-----	0.
1 1005	65	80.	-----	18.	-----
1 1015	75	-----	0.	-----	14.
1 1105	125	7.	-----	14.	-----
1 1115	135	-----	13.	-----	4.
1 1205	185	87.	-----	32.	-----
1 1215	195	-----	20.	-----	0.
1 1305	245	7.	-----	28.	-----
1 1315	255	-----	0.	-----	7.
1 1405	305	173.	-----	11.	-----
1 1415	315	-----	-33.	-----	-18.
1 1505	365	87.	-----	7.	-----
1 1515	375	-----	40.	-----	0.
1 1605	425	13.	-----	4.	-----
1 1615	435	-----	-13.	-----	35.

----- NO DATA TAKEN

NOTES

- 559
A HEAT CLEANED SYRINGE BEFORE SAMPLING.
B PRESSURE ROSE SO COLUMN FLOW CHANGED--MAY HAVE AFFECTED AREAS.

AFF-117
NOX-AIR IRRADIATION
1981 AUGUST 19

0825: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 20.8 C
DRY BULB: 32.6 C R.H.=34% DEW POINT: 14.4 C
0937: END FILL.
0950: INJECTED 6.2 ML. NO₂.
0952: INJECTED 20.0 ML. NO.
0954: INJECTED 0.46 ML. PROPANE AND 0.46 ML. PROPENE.
0957: MIX BAG.
1100: UNCOVER BAG (T=0).
1105: WEATHER: SUNNY AND HOT.
1300: RUN OVER.
1315: BAG DUMPED AND REMOVED!

RESULTS:

CALC. AV. OH = $30.8 \times D \ln(\text{PROPANE/PROPENE})/DT = 0.081 \text{ PPT}$
CALC. RAD. INPUT = $16.0 \times (\text{AVG. OH}) \times (60 + \text{MIN. AVG. NO}_2) = 0.159 \text{ PPB/MIN}$
 $-D(\text{NO})/DT = 0.13 \text{ PFB/MIN}$

T=0 AT 1100 PST

BAG NO. 23 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	35.7	2.5	DEG C
UV RAD	EPPLLEY-2	3.39	0.16	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.380	PPM
NO ₂ -UNC	B-NOX-1	0.118	PPM
PROPANE	DMS-1	0.0116	PPM
PROPENE	DMS-1	0.0087	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	R-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR; SN 61479
4131	EPPLLEY-2	EPPLLEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-117
 NOX-AIR IRRADIATION
 1981 AUGUST 19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	HYDRO PPT
1 1007	-53	-----	-----	-----	-----	0.0115	0.0091	0.00
1 1023	-37	-----	-----	-----	-----	0.0129	0.0102	0.00
1 1045	-15	0.000	0.380	0.120	0.500	0.0116	0.0087	-0.00
1 1100	0	0.000	0.380	0.118	0.500	0.0125	0.0096	0.00
1 1115	15	0.000	0.378	0.120	0.500	0.0125	0.0096	0.10
1 1130	30	0.000	0.378	0.120	0.500	0.0093	0.0065	0.10
1 1145	45	0.000	0.377	0.123	0.500	0.0110	0.0072	-0.00
1 1200	60	0.000	0.377	0.124	0.500	0.0113	0.0077	0.30
1 1215	75	0.000	0.372	0.121	0.500	0.0095	0.0056	-0.20
1 1230	90	0.000	0.370	0.124	0.500	0.0111	0.0072	0.20
1 1245	105	0.000	0.369	0.121	0.500	0.0097	0.0055	-0.00
1 1300	120	0.000	0.363	0.125	0.500	0.0106	0.0061	-0.01

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	HCHO PPM CA
1 1040	-20	0.017
1 1250	110	0.002

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

NC	PROPANE PPM DMS-1	PROPENE PPM DMS-1	HYDROXYL PPT	THC PPMC BN6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	PAN PPM ECD-3
--	0.0115	0.0091	0.004	-----	-----	-----	-----
--	0.0129	0.0102	0.071	-----	-----	-----	-----
00	0.0116	0.0087	-0.047	2.53	32.3	-----	0.000
00	0.0125	0.0096	0.000	-----	31.9	3.64	-----
00	0.0125	0.0096	0.197	-----	33.2	3.55	-----
00	0.0093	0.0065	0.123	-----	34.8	3.37	-----
00	0.0110	0.0072	-0.064	-----	36.1	3.09	-----
00	0.0113	0.0077	0.308	-----	37.0	3.50	-----
00	0.0095	0.0056	-0.218	-----	36.9	3.46	-----
00	0.0111	0.0072	0.279	-----	37.5	3.37	-----
00	0.0097	0.0055	-0.018	-----	38.0	3.28	-----
00	0.0106	0.0061	-0.018	2.92	39.0	3.28	0.000

2

AFF-118

NOX-AIR IRRADIATION
1981 AUGUST 20

0839: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 21.0 C
DRY BULB: 38.0 C R.H.=20% DEW POINT: 10.9 C
0951: END FILL.
0958: INJECTED 6.2 ML. NO₂.
1000: INJECTED 20.0 ML. NO.
1002: INJECTED 0.46 ML. PROPENE AND 0.46 ML. PROPANE.
1005: MIX BAG.
1100: UNCOVER BAG (T=0).
1105: WEATHER: SUNNY, CLEAR, HOT.
1300: RUN OVER, BAG DUMPED.

RESULTS:

CALC. AVG. OH = $30.8 \times D \ln(\text{PROPANE/PROPENE})/DT = 0.033 \text{ PPT}$
CALC. RAD. INPUT = $16.0 \times (\text{AVG. OH}) \times (60 + \text{MIN. AVG. NO}_2) = 0.063 \text{ PPB/MIN}$
 $-R(\text{NO})/DT = 0.13 \text{ PPB/MIN}$

T=0 AT 1100 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	39.9	2.4	DEG C
UV RAD	EPPLEY-2	4.20	0.23	MW/CM ²
HYDROXYL		0.017	0.049	FPT

ID	INST.	INITIAL COND.	UNITS
NO	B-NOX-1	0.391	PPM
NO ₂ -UNC	B-NOX-1	0.119	PPM
PROPANE	DMS-1	0.1240	PPM
PROPENE	DMS-1	0.0090	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	BASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX B-01BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER PAG
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-118
NOX-AIR IRRADIATION
1981 AUGUST 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/(-----)
1 1045	-15	0.000	0.392	0.117	0.510	0.0124	0.0090	0.52
1 1100	0	0.000	0.391	0.119	0.510	0.0135	0.0101	0.49
1 1115	15	0.000	0.396	0.121	0.510	-----	-----	-----
1 1130	30	0.000	0.392	0.120	0.510	-----	-----	-----
1 1145	45	0.000	0.389	0.117	0.508	-----	-----	-----
1 1200	60	0.000	0.388	0.121	0.509	-----	-----	-----
1 1215	75	0.000	0.384	0.120	0.508	0.0129	0.0088	0.59
1 1230	90	0.000	0.386	0.121	0.508	0.0123	0.0082	0.62
1 1245	105	0.000	0.378	0.119	0.500	0.0136	0.0091	0.60
1 1300	120	0.000	0.380	0.121	0.500	0.0135	0.0089	0.62

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	HCHO PPM CA	ACETALD PPM 10'C-600
1 1040	-20	0.008	-----
1 1245	105	-----	0.0085
1 1253	113	0.004	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

X-UNC PPM NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPFLEY-2	PAN PPM ECD-3
0.510	0.0124	0.0090	0.5230	3.57	36.6	-----	0.001
0.510	0.0135	0.0101	0.4990	-----	36.6	4.27	-----
0.510	-----	-----	-----	-----	37.5	4.36	-----
0.510	-----	-----	-----	-----	39.2	4.45	-----
0.508	-----	-----	-----	-----	39.8	4.41	-----
0.509	-----	-----	-----	-----	40.7	4.27	-----
0.508	0.0129	0.0088	0.5930	-----	41.2	4.27	-----
0.508	0.0123	0.0082	0.6220	-----	42.3	4.00	-----
0.500	0.0136	0.0091	0.6020	-----	42.2	3.91	-----
0.500	0.0135	0.0089	0.6250	4.21	42.8	3.82	0.000

2

AFF-119

PROPENE - NOX CONDITIONING
1981 AUGUST 21

0615: FILL STARTED. WE: 6.0 DRY: 0.0 WET BULB: 18.5 C
DRY BULB: 31.8 C R.H.=27% DEW POINT: 9.7 C
0730: END FILL.
0743: INJECTED 6.2 ML. NO₂.
0745: INJECTED 20.0 ML. NO.
0747: INJECTED 22.5 ML. PROPENE.
0750: MIX BAG.
0900: UNCOVER BAG (T=0).
0905: WEATHER: CLEAR, HOT, AND SUNNY.
1330: END RUN, DUMP BAG.

T=0 AT 900 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	39.5	5.5	DEG C
UV RAD	EPPLEY-2	3.44	0.57	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.371	PPM
NO ₂ -UNC	B-NOX-1	0.128	PPM

INSTRUMENTS USED

564

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

CLOCK	ELAPSED	OZONE	NO	NO ₂ -UNC	NOX-UNC	PROPENE	T	UV R
TIME	TIME	PPM	PPM	PPM	PPM	PPM	DEG C	MW/C
DY	HR.	(MIN)	D-1790	B-NOX-1	B-NOX-1	DMS-1	DORIC-1	EPPL
1	800	-60	-----	-----	-----	0.4588	-----	-----
1	830	-30	-----	-----	-----	-----	-----	-----
1	845	-15	0.000	0.371	0.125	0.500	-----	32.6
1	900	0	0.000	0.371	0.128	0.500	-----	31.9
1	1000	60	0.002	0.282	0.190	0.495	-----	38.3
1	1100	120	0.013	0.191	0.310	0.472	-----	41.0
1	1200	180	0.115	0.022	0.397	0.422	-----	43.0
1	1300	240	0.353	0.008	0.337	0.343	-----	44.6
1	1320	260	-----	-----	-----	-----	-----	-----
1	1330	270	0.463	0.008	0.307	0.312	0.0477	45.1
----- NO DATA TAKEN								

18.5 C

PROPENE PPM DMS-1	T DEG C DORTC-1	UV RAD MW/CM ² EFFLEY-2	PAN PPM ECD-3	HCHO PPM CA	ACETALD PPM 10'C-600
0.4588	-----	-----	-----	-----	0.0067
-----	-----	-----	-----	0.167 A	-----
-----	32.6	-----	0.000	-----	-----
-----	31.9	2.63	-----	-----	-----
-----	38.3	3.41	-----	-----	-----
-----	41.0	4.09	-----	-----	-----
-----	43.0	4.05	-----	-----	-----
-----	44.6	3.46	-----	-----	-----
-----	-----	-----	-----	0.103	-----
0.0477	45.1	3.00	0.059	-----	-----

2

AFF-119
PROPENE - NOX CONDITIONING
1981 AUGUST 21

NOTES

A POSSIBLE CONTAMINATION.

AFF-120
OZONE DECAY
1981 AUGUST 21

DAY 1 (AUGUST 21)

1506: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 21.7
DRY BULB: 38.2 R.H.=22%
1602: INJECTED 9.3 LITERS OZONE (~2.2%) WHILE BAG WAS FILLING.
1617: END FILL.
1619: MIX BAG.
DAY 3 (AUGUST 23)
1050: BAG 80% FULL.
DUMPED AFTER LAST OZONE READING.

RESULTS:

OZONE DECAY RATE = 0.44 %/HR

T=0 AT 0 PST

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790
1 1630	0	3.010
3 1050	2540	2.498

----- NO DATA TAKEN

995
996

AFF-121
NOX-AIR IRRADIATION
1981 AUGUST 24

0745: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 20.8 C
DRY BULB: 36.1 R.H.=24% DEW POINT: 11.9%
0856: END FILL.
0909: INJECTED 6.2 ML. NO₂.
0911: INJECTED 20.0 ML. NO.
0913: INJECTED 0.46 ML. PROPANE AND 0.46 ML. PROPENE.
0916: MIX BAG.
1100: UNCOVER BAG (T=0).
1105: WEATHER: HOT AND SUNNY.
1300: RUN OVER.

RESULTS:

CALC. AVG. OH = 30.8 * D LN(PROPANE/PROPENE)/DT = 0.032 PPT
CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂) = 0.062 PPB/MIN
-D(NO)/DT = 0.07 PPB/MIN

T=0 AT 1100 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	40.7	1.8	DEG C
UV RAD	EPPELEY-2	4.01	0.50	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.360	PPM
NO ₂ -UNC	B-NOX-1	0.125	PPM
PROPANE	DMS-1	0.0127	PPM
PROPENE	DMS-1	0.0102	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX S101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPELEY-2	EPPELEY 14290 UV RADIOMETER; UNDER BAG
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
4090	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-121
 NOX-AIR IRRADIATION
 1981 AUGUST 24

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	OZONE PPM B-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C1
1 930	-90	-----	-----	-----	-----	0.0127	0.0102	0.4200
1 1000	-60	-----	-----	-----	-----	0.0110	0.0082	0.4930
1 1020	-40	-----	-----	-----	-----	0.0120	0.0095	0.4380
1 1045	-15	0.000	0.361	0.125	0.498	-----	-----	-----
1 1100	0	0.000	0.360	0.125	0.495	0.0127	0.0102	0.4260
1 1115	15	0.000	0.357	0.120	0.489	0.0127	0.0100	0.4410
1 1130	30	0.000	0.358	0.122	0.491	0.0105	0.0086	0.4150
1 1145	45	0.000	0.356	0.120	0.488	0.0118	0.0089	0.4870
1 1200	60	0.000	0.357	0.122	0.490	0.0095	0.0075	0.4430
1 1215	75	0.000	0.357	0.121	0.488	-----	-----	-----
1 1230	90	0.000	0.353	0.118	0.482	0.0103	0.0076	0.5140
1 1245	105	0.000	0.351	0.122	0.486	0.0102	0.0074	0.5250
1 1300	120	0.000	0.351	0.122	0.481	0.0126	0.0089	0.5470

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	HCHO PPM CA	ACETALD PPM 10'C-600
1 930	-90	-----	0.0056
1 1025	-35	0.036	-----
1 1250	110	0.000	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

PROPANE PPM MS-1	PROPENE PPM DMS-1	LNC3/C3=	THC PPMC BK6800-1	T DEG C BORIC-1	UV RAD MW/CM2 EPPLEY-2	PAN PPM ECD-3
0127	0.0102	0.4200	-----	-----	-----	-----
0110	0.0082	0.4930	-----	-----	-----	-----
0120	0.0095	0.4380	-----	-----	-----	-----
-----	-----	-----	2.99	38.1	-----	0.000
0127	0.0102	0.4260	-----	37.8	4.55	-----
0127	0.0100	0.4410	-----	38.9	4.45	-----
0105	0.0086	0.4150	-----	40.6	4.36	-----
0118	0.0089	0.4870	-----	41.0	4.18	-----
0095	0.0075	0.4430	-----	41.0	4.18	-----
-----	-----	-----	-----	41.9	4.18	-----
0103	0.0076	0.5140	-----	42.6	3.73	-----
0102	0.0074	0.5250	-----	42.4	3.19	-----
0126	0.0087	0.5470	2.73	42.3	3.28	0.000

AFF-122
DIESEL, 4-DAY STATIC
1981 AUGUST 25

DAY 1 (AUGUST 25)

0545: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 16.8
DRY BULB: 28.4 R.H.: 29% DEW POINT: 8.9 C
0703: END FILL.
0720: MIX BAG.
0730: INJECTED 6.2 ML. NO₂.
0732: INJECTED 20.0 ML. NO.
0734: INJECTED 400 ML. FREON 12.
0740: INJECTED 1500 MICROLITERS DIESEL FUEL AT
250 DEGREES C FOR 40 MINUTES.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HOT.

DAY 2 (AUGUST 26)

0800: START SAMPLING.
0805: WEATHER: SUNNY AND HOT.
BAG HAS APPROX. 75% OF ITS VOLUME LEFT.

DAY 3 (AUGUST 27)

0800: START SAMPLING.
BAG HAS APPROX. 60% OF ITS VOLUME LEFT.
0805: WEATHER: HOT AND SUNNY.
0831: INJECTED 20.0 ML. NO INTO PURE AIR STREAM WHILE FILLING BAG.
0841: INJECTED 6.2 ML. NO₂ INTO PURE AIR STREAM WHILE FILLING BAG.
DILUTION FACTOR = 0.84
0851: END FILL.
0852: MIX BAG.

DAY 4 (AUGUST 28)

0800: START SAMPLING.
0805: WEATHER: HOT AND SUNNY.
1510: END SAMPLING, RUN OVER.

RESULTS	DAY 1	DAY 2	DAY 3	DAY 4
AVG.T(DEG.C)	44(+-2)	42(+5)	44(+5)	42(+5)
AVG.UV(MW/CM ²)	2.5(+1.0)	2.3(+0.9)	2.4(+0.9)	2.4(+0.7)

T=0 AT 900 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	42.3	5.2	DEG C
UV RAD	EPPLEY-2	2.40	0.82	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.348	PPM
NO ₂ -UNC	B-NOX-1	0.125	PPM
THC	BK6800-1	14.40	PPMC

569

AFF-122
DIESEL, 4-DAY STATIC
1981 AUGUST 25

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1790	D-1790	DASIBI 1790 OZONE MONITOR
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
4000	ECD-3	AF-LAB; 12° 5% CARBOWAX-600 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2100	PN-1	RM-121 POROPAK-N GC; FID
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D

570

AFF-122
 DIESEL, 4-DAY STATIC
 1981 AUGUST 25

CLOCK	ELAPSED	OZONE	NO	NO2-UNC	NOX-UNC	NMHC	THC	T
	TIME	PPM	PPM	PPM	PPM	PPMC	PPMC	DE
DY	HR.	(MIN)	D-1790	B-NOX-1	B-NOX-1	BYRON	BK6800-1	DORI
1	705	-115	0.000	0.000	0.000	-----	-----	27
1	845	-15	0.077	0.348	0.125	0.481	-----	14.40
1	1005	65	0.099	0.042	0.347	0.402	-----	34
1	1105	125	0.391	0.000	0.218	0.220	-----	11.80
1	1205	185	0.528	0.000	0.087	0.087	-----	43
1	1305	245	0.514	0.000	0.047	0.047	-----	13.70
1	1405	305	0.468	0.000	0.031	0.031	-----	45
1	1505	365	0.420	0.000	0.027	0.027	23.20	12.60
1	1605	425	0.383	0.000	0.022	0.022	21.00	43
								41
2	805	1385	0.236	0.003	0.020	0.022	19.10	9.05
2	905	1445	0.223	0.001	0.020	0.021	20.70	9.05
2	1005	1505	0.217	0.000	0.021	0.021	18.80	11.00
2	1105	1565	0.217	0.000	0.022	0.022	20.60	11.50
2	1205	1625	0.221	0.000	0.023	0.023	18.90	11.60
2	1305	1685	0.216	0.000	0.021	0.021	19.70	12.50
2	1405	1745	0.208	0.000	0.021	0.021	19.60	11.40
2	1505	1805	0.198	0.000	0.021	0.021	19.00	12.40
2	1605	1865	0.184	0.000	0.020	0.020	18.20	44
								41
3	805	2825	0.105	0.000	0.017	0.019	18.70	9.36
3	905	2885	0.023	0.151	0.280	0.458	14.20	10.30
3	1005	2945	0.131	0.020	0.371	0.398	15.90	9.52
3	1105	3005	0.439	0.004	0.294	0.301	15.40	9.75
3	1205	3065	0.727	0.004	0.171	0.177	13.80	9.17
3	1305	3125	0.815	0.000	0.100	0.101	16.00	9.75
3	1405	3185	0.785	0.002	0.062	0.066	14.50	8.48
3	1505	3245	0.733	0.000	0.044	0.047	13.30	9.05
3	1605	3305	0.682	0.000	0.039	0.040	13.50	46
								42
4	805	4265	0.497	0.000	0.030	0.031	15.40	9.17
4	905	4325	0.468	0.003	0.036	0.039	13.80	9.05
4	1005	4385	0.438	0.003	0.037	0.040	13.20	9.29
4	1105	4445	0.412	0.000	0.037	0.038	13.40	10.10
4	1205	4505	0.393	0.002	0.039	0.040	14.00	8.94
4	1305	4565	0.374	0.003	0.038	0.039	14.00	8.94
4	1405	4625	0.354	0.002	0.038	0.040	-----	8.71
4	1505	4685	0.334	0.002	0.037	0.039	12.40	45
								44

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

NC	NMHC PPMC BYRON	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	*PART>.3 PART/CC CLIMET	*PART>.5 PART/CC CLIMET
00	-----	-----	27.4	-----	0.0	0.	0.
81	-----	14.40	34.5	-----	30.0	541.	498.
02	-----	11.80	41.0	1.82	22.0	515.	438.
20	-----	13.80	43.7	3.64	19.5	525.	483.
87	-----	13.70	45.6	3.05	16.9	525.	496.
47	-----	11.80	46.4	3.46	13.2	528.	498.
31	-----	12.50	45.3	2.73	10.2	527.	493.
27	23.20	12.60	43.5	1.68	7.6	525.	481.
22	21.00	13.40	41.6	1.14	6.2	522.	468.
22	19.10	9.05	33.0	1.37	2.0	88.	76.
21	20.70	9.05	36.5	2.26	1.8	247.	76.
21	18.80	11.00	40.6	2.14	1.2	368.	163.
22	20.60	11.50	44.1	3.55	1.1	397.	218.
23	18.90	11.60	45.7	3.23	0.9	448.	251.
21	19.70	12.50	46.9	3.09	0.8	475.	257.
21	19.60	11.40	46.4	2.45	0.6	421.	320.
21	19.00	12.40	44.5	1.82	0.5	364.	319.
20	18.20	12.10	41.4	1.05	0.5	315.	260.
19	18.70	9.86	33.0	1.46	1.5	5.	3.
58	14.20	10.30	37.8	2.27	0.8	291.	74.
98	15.90	9.52	42.4	1.91	0.7	428.	279.
01	15.40	9.75	45.6	3.64	0.8	516.	430.
77	13.80	9.17	47.4	3.49	2.9	504.	440.
01	16.00	9.75	48.9	3.19	2.4	514.	436.
66	14.50	8.48	48.2	2.54	1.9	515.	433.
47	13.30	9.05	46.6	1.82	1.4	508.	424.
40	13.50	9.52	42.3	1.05	1.1	492.	404.
31	15.40	9.17	33.4	1.55	2.0	27.	24.
39	13.80	9.05	37.0	2.14	0.9	199.	32.
40	13.20	9.29	41.2	2.14	0.7	325.	116.
38	13.40	10.10	44.3	3.55	0.5	391.	174.
40	14.00	8.94	46.5	3.32	0.8	439.	198.
39	14.00	8.94	47.4	2.68	0.6	408.	285.
40	-----	8.71	45.6	2.18	0.4	351.	322.
39	12.40	8.48	44.0	1.77	0.4	292.	265.

Z

AFF-122
DIESEL, 4-DAY STATIC
1981 AUGUST 25

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	*PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	N-C9 PPM VAR 3700	N-C1 PPR VAR 3
1 705	-115	0.	0.0	-1.	-203.	-3.	-----	----
1 830	-30	-----	-----	-----	-----	-----	0.0117	0.00
1 845	-15	342.	80.0	40.	7.6E 04	1523.	-----	----
1 1005	65	208.	83.0	60.	8.4E 04	2352.	0.0066	0.00
1 1105	125	326.	100.0 A	110.	1.1E 05	4143.	-----	0.00
1 1205	185	378.	100.0 A	141.	1.6E 05	4522.	-----	0.00
1 1305	245	374.	100.0 A	125.	9.2E 04	4001.	-----	----
1 1405	305	353.	100.0 A	127.	8.3E 04	3506.	0.0076	0.00
1 1505	365	320.	100.0 A	88.	5.9E 04	2674.	0.0058	0.00
1 1605	425	282.	100.0 A	105.	4.4E 04	2298.	-----	0.00
2 805	1385	2.	2.5	8.	8298.	249.	-----	----
2 905	1445	3.	7.1	11.	1.0E 04	325.	-----	----
2 1005	1505	11.	14.0	8.	1.1E 04	301.	0.0091	0.00
2 1105	1565	24.	16.5	14.	8254.	348.	0.0068	0.00
2 1205	1625	38.	17.0	9.	7681.	306.	0.0106	0.00
2 1305	1685	46.	15.0	10.	7164.	263.	-----	----
2 1405	1745	55.	12.0	12.	6436.	258.	0.0064	0.00
2 1505	1805	50.	9.5	10.	4334.	214.	0.0132	0.00
2 1605	1865	386.	7.0	7.	2230.	152.	-----	----
3 805	2825	0.	0.8	5.	3748.	159.	-----	0.00
3 905	2885	1.	7.6	15.	6660.	298.	-----	0.00
3 1005	2945	31.	17.0	8.	7365.	297.	-----	----
3 1105	3005	146.	17.0	11.	1.1E 04	300.	-----	0.00
3 1205	3065	188.	34.0	23.	2.4E 04	712.	-----	0.01
3 1305	3125	212.	50.0	28.	2.1E 04	823.	-----	----
3 1405	3185	209.	46.0	27.	2.0E 04	749.	-----	----
3 1505	3245	192.	34.0	30.	1.4E 04	648.	-----	----
3 1605	3305	169.	28.0	22.	1.2E 04	503.	-----	----
4 805	4265	1.	1.8	5.	6141.	159.	-----	0.00
4 905	4325	3.	5.2	8.	6325.	209.	-----	----
4 1005	4385	6.	8.8	14.	7732.	273.	-----	----
4 1105	4445	13.	12.0	12.	7131.	253.	-----	0.00
4 1205	4505	24.	12.2	6.	6239.	204.	-----	----
4 1305	4565	40.	11.0	9.	5134.	220.	-----	----
4 1405	4625	49.	8.5	7.	5491.	169.	-----	----
4 1505	4685	37.	7.0	11.	4226.	175.	-----	----

----- NO DATA TAKEN

R.N T/CC -023	AER.S UM2/CC TSI-023	N-C9 PPM VAR 3700	N-C10 PPM VAR 3700	N-C11 PPM VAR 3700	N-C12 PPM VAR 3700	N-C13 PPM VAR 3700	N-C14 PPM VAR 3700
03.	-3.	-----	-----	-----	-----	-----	-----
-----	-----	0.0117	0.0065	0.0129	0.0152	0.0269	0.040
6E 04	1523.	-----	-----	-----	-----	-----	-----
4E 04	2352.	0.0066	0.0071	0.0121	0.0163	0.0321	0.051
1E 05	4143.	-----	0.0066	0.0113	0.0165	0.0309	0.039
6E 05	4522.	-----	0.0063	0.0109	0.0149	0.0301	0.058
2E 04	4001.	-----	-----	-----	-----	-----	-----
3E 04	3506.	0.0076	0.0061	0.0098	0.0138	0.0283	0.095
9E 04	2674.	0.0058	0.0061	0.0105	0.0133	0.0260	0.037
4E 04	2298.	-----	0.0065	0.0101	0.0134	0.0239	0.035
298.	249.	-----	-----	-----	-----	-----	-----
0E 04	325.	-----	-----	-----	-----	-----	-----
1E 04	301.	0.0091	0.0063	0.0105	0.0189	0.0519	0.090
254.	348.	0.0068	0.0062	0.0098	0.0139	0.0331	0.060
681.	306.	0.0106	0.0056	0.0092	0.0126	0.0257	0.040
64.	263.	-----	-----	-----	-----	-----	-----
436.	258.	0.0064	0.0065	0.0105	0.0130	0.0252	0.038
334.	214.	0.0132	0.0057	0.0086	0.0119	0.0228	0.030
230.	152.	-----	-----	-----	-----	-----	-----
748.	159.	-----	0.0070	0.0093	0.0134	0.0299	0.031
660.	298.	-----	0.0061	0.0088	0.0107	0.0178	0.021
365.	297.	-----	-----	-----	-----	-----	-----
.1E 04	300.	-----	0.0093	0.0067	0.0096	0.0162	0.024
.4E 04	712.	-----	0.0138	0.0074	0.0087	0.0151	0.024
.1E 04	823.	-----	-----	0.0064	0.0086	0.0146	0.020
.0E 04	749.	-----	-----	-----	-----	-----	-----
.4E 04	648.	-----	-----	0.0059	0.0072	0.0117	0.016
.2E 04	503.	-----	-----	0.0061	0.0063	0.0102	0.013
141.	159.	-----	0.0060	0.0069	0.0085	0.0168	0.017
325.	209.	-----	-----	0.0050	0.0079	0.0115	0.013
732.	273.	-----	-----	0.0050	0.0059	0.0103	0.012
131.	253.	-----	0.0047	0.0057	0.0061	0.0102	0.014
239.	204.	-----	-----	-----	-----	0.0098	0.013
134.	220.	-----	-----	-----	-----	-----	-----
491.	169.	-----	-----	-----	0.0051	0.0076	0.009
226.	175.	-----	-----	-----	-----	-----	-----

3

AFF-122
DIESEL, 4-DAY STATIC
1981 AUGUST 25

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	N-C15 RAW DATA VAR 3700	FREON 12 RAW DATA DMS-1	CO PPM BYRON	PAN PPM ECD-3	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.0 PART/CC TSI-023
1 705	-115	-----	0.000	-----	0.000	-----	-334.	-609.
1 830	-30	0.0554 B	342.5	-----	-----	-----	-----	-----
1 835	-25	-----	-----	-----	-----	0.027	-----	-----
1 845	-15	-----	-----	-----	0.000	-----	4.0E 04	7395.
1 1005	65	0.0663	-----	-----	0.005	-----	3340.	1.3E 1
1 1105	125	-----	-----	-----	0.033	-----	2.4E 04	2349.
1 1200	180	-----	-----	-----	-----	0.044	-----	-----
1 1205	185	0.0798	-----	-----	0.036	-----	9.0E 04	4524.
1 1305	245	-----	-----	-----	0.024	-----	3.4E 04	-1479.
1 1405	305	0.0628	-----	-----	0.013	-----	3.4E 04	8613.
1 1505	365	0.0569	-----	2.38	0.010	-----	2.7E 04	-1305.
1 1600	420	-----	-----	-----	-----	0.092	-----	-----
1 1605	425	0.0388	336.4	2.20	0.008	-----	2.1E 04	609.
2 800	1380	-----	-----	-----	-----	0.387	-----	-----
2 805	1385	-----	344.1	2.70	0.004	-----	1837.	435.
2 905	1445	-----	-----	2.95	0.007	-----	4509.	0.
2 1005	1505	0.1171	-----	2.98	0.004	-----	5010.	609.
2 1105	1565	0.0884	-----	3.04	0.004	-----	3674.	0.
2 1200	1620	-----	-----	-----	-----	0.084	-----	-----
2 1205	1625	0.0634	-----	2.84	0.004	-----	3006.	870.
2 1305	1685	-----	-----	3.02	0.002	-----	3841.	0.
2 1405	1745	0.0595	-----	2.88	0.003	-----	3674.	522.
2 1505	1805	0.0444	-----	3.33	0.004	-----	2338.	87.
2 1600	1860	-----	-----	-----	-----	0.107	-----	-----
2 1605	1865	-----	331.8	3.30	0.001	-----	1002.	-174.
3 800	2820	-----	-----	-----	-----	0.130	-----	-----
3 805	2825	0.0432	338.9	3.57	0.004	-----	-1670.	1566.
3 905	2885	0.0298	294.9	2.94	0.002	-----	2839.	-174.
3 910	2890	-----	-----	-----	-----	0.088	-----	-----
3 1005	2945	-----	274.9	2.99	0.006	-----	2839.	261.
3 1105	3005	0.0286	-----	3.32	0.023	-----	6346.	1218.
3 1200	3060	-----	-----	-----	-----	0.126	-----	-----
3 1205	3065	0.0437	-----	3.37	0.042	-----	1.3E 04	870.
3 1305	3125	0.0473	-----	3.59	0.043	-----	686.	870.
3 1405	3185	-----	-----	3.87	0.026	-----	6350.	2958.
3 1505	3245	0.0214	-----	3.75	0.018	-----	8183.	609.
3 1600	3300	-----	-----	-----	-----	0.173	-----	-----
3 1605	3305	0.0206	281.6	3.92	0.010	-----	7515.	0.
4 800	4260	-----	-----	-----	-----	0.222	-----	-----
4 805	4265	0.0275	282.6	4.27	0.005	-----	2338.	261.
4 905	4325	0.0187	-----	4.27	0.007	-----	3006.	0.
4 1005	4385	0.0181	-----	4.34	0.009	-----	4676.	87.
4 1105	4445	0.0208	-----	4.34	0.008	-----	4509.	0.
4 1205	4505	-----	-----	4.40	0.006	0.161	3674.	-261.
4 1305	4565	0.0198	-----	4.27	0.005	-----	2672.	0.
4 1405	4625	-----	-----	-----	0.003	-----	3340.	87.
4 1500	4680	-----	-----	-----	-----	0.207	-----	-----
4 1505	4685	0.0150	282.1	4.44	0.005	-----	3006.	-343.

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023
000	-----	-334.	-609.	755.	-48.	74.	-40.
000	0.027	-----	-----	-----	-----	-----	-----
000	-----	4.0E 04	7395.	1.3E 04	1.4E 04	1599.	200.
005	-----	3340.	1.3E 04	4.6E 04	2.0E 04	1168.	67.
033	-----	2.4E 04	2349.	3.8E 04	4.3E 04	4858.	200.
036	0.044	-----	-----	-----	-----	-----	-----
024	-----	9.0E 04	4524.	1.6E 04	4.2E 04	7761.	467.
013	-----	3.4E 04	-1479.	1.2E 04	4.0E 04	6802.	374.
010	-----	3.4E 04	8613.	3774.	2.9E 04	6949.	687.
008	-----	2.7E 04	-1305.	4396.	2.3E 04	5732.	487.
008	0.092	-----	-----	-----	-----	-----	-----
004	-----	2.1E 04	609.	2442.	1.3E 04	5227.	580.
004	0.387	-----	-----	-----	-----	-----	-----
004	-----	1837.	435.	4218.	1494.	234.	80.
007	-----	4509.	0.	2664.	2844.	209.	133.
004	-----	5010.	609.	2264.	3229.	307.	27.
004	-----	3674.	0.	977.	2940.	615.	27.
004	0.084	-----	-----	-----	-----	-----	-----
004	-----	3006.	870.	444.	2675.	603.	93.
002	-----	3841.	0.	622.	2097.	590.	0.
003	-----	3674.	522.	89.	1615.	406.	120.
004	-----	2338.	87.	222.	1181.	418.	73.
001	0.107	-----	-----	-----	-----	-----	-----
001	-----	1002.	-174.	44.	916.	418.	13.
004	0.130	-----	-----	-----	-----	-----	-----
004	-----	-1670.	1566.	2975.	699.	98.	80.
002	-----	2839.	-174.	1154.	2555.	184.	67.
004	0.088	-----	-----	-----	-----	-----	-----
004	-----	2839.	261.	577.	3109.	566.	13.
023	-----	6346.	1218.	266.	2289.	664.	27.
042	0.126	-----	-----	-----	-----	-----	-----
043	-----	1.3E 04	870.	2575.	5977.	1291.	140.
026	-----	9686.	870.	1998.	6796.	1722.	107.
018	-----	8350.	2958.	1154.	5302.	1624.	187.
010	0.178	-----	-----	-----	-----	-----	-----
010	-----	8183.	609.	311.	3278.	1537.	207.
005	0.105	-----	-----	-----	-----	-----	-----
005	-----	7515.	0.	666.	2048.	1341.	207.
005	0.222	-----	-----	-----	-----	-----	-----
007	-----	2338.	261.	2131.	1253.	111.	47.
007	-----	3006.	0.	1243.	1735.	320.	7.
009	-----	4676.	87.	400.	2193.	308.	33.
008	-----	4509.	0.	444.	1615.	492.	53.
006	0.161	-----	-----	-----	-----	-----	-----
005	-----	3674.	-261.	622.	1663.	541.	0.
003	-----	2672.	0.	222.	1783.	406.	40.
003	-----	3340.	87.	311.	1398.	344.	0.
005	0.207	-----	-----	-----	-----	-----	-----
005	-----	3006.	-348.	444.	699.	394.	0.

2

AFF-122

DIESEL, 4-DAY STATIC
1981 AUGUST 25

CLOCK ELAPSED PART.750
TIME TIME PART/CC
DY HR. (MIN) TSI-023

1 705 -115 0.
1 845 -15 0.
1 1005 65 63.
1 1105 125 28.
1 1205 185 56.
1 1305 245 49.
1 1405 305 67.
1 1505 365 0.
1 1605 425 130.

2 805 1385 0.
2 905 1445 0.
2 1005 1505 0.
2 1105 1565 21.
2 1205 1625 -11.
2 1305 1685 14.
2 1405 1745 11.
2 1505 1805 14.
2 1605 1865 11.

3 805 2825 0.
3 905 2885 35.
3 1005 2945 0.
3 1105 3005 11.
3 1205 3065 0.
3 1305 3125 14.
3 1405 3185 7.
3 1505 3245 32.
3 1605 3305 7.

4 805 4265 0.
4 905 4325 14.
4 1005 4385 35.
4 1105 4445 18.
4 1205 4505 0.
4 1305 4565 11.
4 1405 4625 11.
4 1505 4685 32.

----- NO DATA TAKEN

NOTES

B IDENTITY OF N-C15 PEAK IS AMBIGUOUS SOMETIMES.
A ACTUALLY >100

574

AFF-123
PURE AIR IRRADIATION
1981 AUGUST 31

"0615: START PURGE.
0725: DUMPED BAG, BEGIN FILL. WET: 6.0 C DRY: 0.0
WET BULB: 17.5 C DRY BULB: 28.5 R.H.=32% DEW POINT: 9.4 C
0840: TURNED OFF PURE AIR.
0900: UNCOVERED BAG (T=0).
0905: WEATHER: WARM, CLEAR, SUNNY.
1410: RUN OVER.

RESULTS: OZONE FORMATION RATE = 17.3 PPB/HR

T=0 AT 900 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	31.7	7.1	DEG C
UV RAD	EPPELEY-2	2.35	0.55	MW/CM ²

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	B-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPELEY-2	EPPELEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

575

AFF-123
PURE AIR IRRADIATION
1981 AUGUST 31

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	COND 10E CNC
1 850	-10	0.000	0.000	0.001	0.005	25.4	-----	-----
1 1005	65	0.009	0.000	0.002	0.006	30.3	1.96	36
1 1035	95	0.017	-----	-----	-----	-----	-----	-----
1 1105	125	0.026	-----	-----	-----	-----	-----	-----
1 1135	155	0.037	-----	-----	-----	-----	-----	-----
1 1205	185	0.047	-----	-----	-----	-----	-----	-----
1 1235	215	0.057	-----	-----	-----	-----	-----	-----
1 1305	245	0.069	-----	-----	-----	-----	-----	-----
1 1335	275	0.079	-----	-----	-----	-----	-----	-----
1 1405	305	0.088	0.000	0.000	0.011	39.4	2.73	9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACE1 PF PN
1 850	-10	4.	3568.	64.	1.89	0.0012	0.0051	0.0
1 1005	65	11.	8.5E 04	508.	-----	-----	-----	-----
1 1405	305	20.	3.7E 04	750.	1.86	0.0026	0.0040	0.0

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

UNC M X-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPEL-Y-2	CONDENS 10E3/CC CNC-143	*PART>.3 PART/CC CLIMET	*PART>.5 PART/CC CLIMET	*PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388
005	25.4	-----	0.6	4.	0.	0.	0.1
006	30.3	1.96	36.0	0.	0.	0.	0.1
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
011	39.4	2.73	9.5	0.	0.	0.	2.1
ANE M -1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM PN-1	ACETYLEN PPM DMS-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	I-C4 PPM DMS-1
89	0.0012	0.0051	0.0012	0.0013	0.0033	0.0004	0.0023
86	0.0026	0.0040	0.0010	0.0011	0.0029	0.0011	0.0015

2

AFF-123
PURE AIR IRRADIATION
1981 AUGUST 31

CLOCK BY HR.	ELAPSED TIME (MIN)	N-C4 PPM DMS-1	I-C4= PPM DMS-1	I-C5= PPM DMS-1	I-C5 PPM DMS-1	N-C5 PPM DMS-1	PAN PPM ECD-3	HCHO PPM CA
1 840	-20	-----	-----	-----	-----	-----	-----	0.00
1 850	-10	0.0009	0.0002	0.0001	0.0003	0.0002	0.000	-----
1 1005	65	-----	-----	-----	-----	-----	-----	-----
1 1340	280	-----	-----	-----	-----	-----	-----	0.00
1 1405	305	0.0007	0.0004	0.0001	0.0001	0.0001	0.002	-----

CLOCK BY HR.	ELAPSED TIME (MIN)	PART. 237 PART/CC TSI-023	PART. 422 PART/CC TSI-023	PART. 750 PART/CC TSI-023
1 850	-10	25.	47.	11.
1 1005	65	652.	40.	7.
1 1405	305	160.	80.	18.

----- NO DATA TAKEN

1/5

12 NOV 1981
PAGE 3

-CS FM S-1	N-C5 PPM RMS-1	PAN PPM ECR-3	HCHO PPM CA	PART,024 PART/CC TSI-023	PART,042 PART/CC TSI-023	PART,075 PART/CC TSI-023	PART,133 PART/CC TSI-023
0003	0.0002	0.000	0.000	2672.	609.	133.	72.
				5.8E 04	2.1E 04	3685.	1325.
0001	0.0001	0.002	0.000	1.7E 04	4611.	6616.	8507.

2

AFF-124
DIESEL, VARIABLE NOX
1981 SEPTEMBER 1

DAY 1 (SEPT. 1)

0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 14.3 C
DRY BULB: 20.5 C R.H.=50% DEW POINT: 10.3 C
0615: END FILL.
0630: LEAK FOUND IN SAMPLING LINE: REPAIRED AT 0730.
0751: INJECTED 1100 MICROLITERS DIESEL FUEL AT 250 DEGREES C FOR 30 MINUTES.
0858: INJECTED 2.5 ML. NO₂ INTO SIDE A.
0900: INJECTED 9.0 ML. NO INTO SIDE A.
0910: INJECTED 1.25 ML. NO₂ INTO SIDE B.
0912: INJECTED 4.5 ML. NO INTO SIDE B.
0915: MIX SIDE A AND SIDE B.
1000: UNCOVER BAG (T=0).
1005: WEATHER: SUNNY AND HOT.
1620: END SAMPLING, DAY 1.
DAY 2 (SEPT. 2)
0900: UNCOVER BAG, DAY 2.
0905: WEATHER: SUNNY AND HOT.
1520: END RUN.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	37(+2)	36(+3)
AVG.UV(MW/CM2)	2.6(+1.0)	2.9(+0.7)

T=0 AT 1000 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	34.4	5.0	DEG C	SIDE 1
T	DORIC-1	34.7	4.3	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.75	0.84	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.377	PPM	SIDE 1
NO	B-NOX-1	0.132	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.143	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.071	PPM	SIDE 2
THC	BK6800-1	9.63	PPMC	SIDE 1
THC	BK6800-1	9.40	PPMC	SIDE 2

AFF-124

DIESEL, VARIABLE NOX
1981 SEPTEMBER 1

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550R
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN:43
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID

AFF-124

DIESEL, VARIABLE NOX
1981 SEPTEMBER 1

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX-U PPM
B-1790	D-1790	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX
1 745	-135	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 935	-25	0.051	-----	0.377	-----	0.143	-----	0.5
1 945	-15	-----	0.039	-----	0.132	-----	0.071	-----
1 1105	65	0.065	-----	0.084	-----	0.310	-----	0.4
1 1115	75	-----	0.176	-----	0.008	-----	0.154	-----
1 1205	125	0.211	-----	0.010	-----	0.319	-----	0.3
1 1215	135	-----	0.329	-----	0.004	-----	0.090	-----
1 1305	185	0.423	-----	0.004	-----	0.196	-----	0.1
1 1315	195	-----	0.383	-----	0.000	-----	0.051	-----
1 1405	245	0.521	-----	0.000	-----	0.105	-----	0.1
1 1415	255	-----	0.370	-----	0.000	-----	0.041	-----
1 1505	305	0.507	-----	0.000	-----	0.072	-----	0.0
1 1515	315	-----	0.338	-----	0.000	-----	0.037	-----
1 1605	365	0.468	-----	0.000	-----	0.059	-----	0.0
1 1615	375	-----	0.314	-----	0.000	-----	0.033	-----
2 835	1355	0.278	-----	0.001	-----	0.022	-----	0.0
2 845	1365	-----	0.192	-----	0.000	-----	0.016	-----
2 1005	1445	0.256	-----	0.000	-----	0.032	-----	0.0
2 1015	1455	-----	0.185	-----	0.001	-----	0.023	-----
2 1105	1505	0.252	-----	0.002	-----	0.040	-----	0.0
2 1115	1515	-----	0.190	-----	0.000	-----	0.028	-----
2 1205	1565	0.264	-----	0.001	-----	0.042	-----	0.0
2 1215	1575	-----	0.199	-----	0.001	-----	0.029	-----
2 1305	1625	0.277	-----	0.001	-----	0.041	-----	0.0
2 1315	1635	-----	0.206	-----	0.001	-----	0.029	-----
2 1405	1685	0.282	-----	0.001	-----	0.042	-----	0.0
2 1415	1695	-----	0.205	-----	0.000	-----	0.030	-----
2 1505	1745	0.280	-----	0.001	-----	0.041	-----	0.0
2 1515	1755	-----	0.201	-----	0.000	-----	0.030	-----

----- NO DATA TAKEN

085

12 NOV 1981
PAGE 3

DE 2 NO PM OX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON
.000	0.000	0.000	0.000	0.000	0.30	0.30
-----	0.143	-----	0.520	-----	10.80	-----
.132	-----	0.071	-----	0.200	-----	11.20
-----	0.310	-----	0.411	-----	10.90	-----
.008	-----	0.154	-----	0.162	-----	9.90
-----	0.319	-----	0.329	-----	9.20	-----
.004	-----	0.090	-----	0.092	-----	10.00
-----	0.196	-----	0.198	-----	8.80	-----
.000	-----	0.051	-----	0.051	-----	9.50
-----	0.105	-----	0.106	-----	8.40	-----
.000	-----	0.041	-----	0.040	-----	8.50
-----	0.072	-----	0.072	-----	8.00	-----
.000	-----	0.037	-----	0.037	-----	8.90
-----	0.059	-----	0.059	-----	8.40	-----
.000	-----	0.033	-----	0.031	-----	9.30
-----	0.022	-----	0.024	-----	8.40	-----
.000	-----	0.016	-----	0.017	-----	9.80
-----	0.032	-----	0.032	-----	7.80	-----
.001	-----	0.023	-----	0.024	-----	9.80
-----	0.040	-----	0.040	-----	8.00	-----
.000	-----	0.028	-----	0.028	-----	8.80
-----	0.042	-----	0.042	-----	7.40	-----
.001	-----	0.029	-----	0.029	-----	9.00
-----	0.041	-----	0.041	-----	8.00	-----
.001	-----	0.029	-----	0.029	-----	9.20
-----	0.042	-----	0.043	-----	7.60	-----
.000	-----	0.030	-----	0.030	-----	8.20
-----	0.041	-----	0.041	-----	7.60	-----
.000	-----	0.030	-----	0.029	-----	9.10

Z

AFF-124
DIESEL, VARIABLE NOX
1981 SEPTEMBER 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	UV RAD	SIDE 1	SIDE 1
		THC PPMC BK6800-1	THC PPMC BK6800-1	T DEG C DORIC-1	T DEG C DORIC-1	MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	CONDENS 10E3/ CNC-1
1 745	-135	5.70	5.70	23.8	23.8	-----	0.1	0.
1 935	-25	9.63	-----	30.8	-----	-----	8.0	-----
1 945	-15	-----	9.40	-----	32.7	-----	-----	7.
1 1105	65	9.75	-----	35.0	-----	3.64	7.8	-----
1 1115	75	-----	10.30	-----	36.1	3.64	-----	6.
1 1205	125	9.40	-----	37.1	-----	3.59	7.5	-----
1 1215	135	-----	10.70	-----	37.1	3.64	-----	7.
1 1305	185	9.86	-----	39.1	-----	3.09	6.2	-----
1 1315	195	-----	9.75	-----	38.7	3.00	-----	6.
1 1405	245	10.90	-----	38.3	-----	2.68	4.8	-----
1 1415	255	-----	10.20	-----	37.2	2.59	-----	5.
1 1505	305	10.60	-----	38.0	-----	1.94	4.0	-----
1 1515	315	-----	9.52	-----	36.6	1.82	-----	4.
1 1605	365	10.30	-----	34.3	-----	1.09	3.1	-----
1 1615	375	-----	10.30	-----	34.7	0.91	-----	3.
2 835	1355	6.74	-----	24.2	-----	-----	0.0	-----
2 845	1365	-----	6.16	-----	26.7	-----	-----	0.
2 1005	1445	10.20	-----	30.8	-----	1.91	18.6	-----
2 1015	1455	-----	9.17	-----	32.6	2.54	-----	8.
2 1105	1505	9.75	-----	34.0	-----	3.59	14.7	-----
2 1115	1515	-----	8.94	-----	34.9	3.64	-----	6.
2 1205	1565	9.05	-----	36.5	-----	3.64	11.2	-----
2 1215	1575	-----	9.52	-----	37.0	3.55	-----	5.
2 1305	1625	9.40	-----	38.0	-----	3.23	8.7	-----
2 1315	1635	-----	10.10	-----	37.7	3.09	-----	4.
2 1405	1685	10.50	-----	38.6	-----	2.68	7.0	-----
2 1415	1695	-----	9.86	-----	38.6	2.63	-----	3.
2 1505	1745	10.00	-----	37.6	-----	1.96	5.3	-----
2 1515	1755	-----	10.90	-----	36.7	1.87	-----	2.

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

DE 2 1 DEG C RIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
23.8	-----	0.1	0.1	0.	0.	0.	0.
	-----	8.0	-----	519.	-----	445.	-----
32.7	-----	-----	7.2	-----	468.	-----	365.
	3.64	7.8	-----	498.	-----	403.	-----
36.1	3.64	-----	6.5	-----	491.	-----	392.
	3.59	7.5	-----	509.	-----	431.	-----
37.1	3.64	-----	7.8	-----	502.	-----	439.
	3.09	6.2	-----	520.	-----	469.	-----
38.7	3.00	-----	6.6	-----	510.	-----	456.
	2.68	4.8	-----	534.	-----	488.	-----
37.2	2.59	-----	5.4	-----	515.	-----	456.
	1.94	4.0	-----	541.	-----	492.	-----
36.6	1.82	-----	4.3	-----	517.	-----	452.
	1.09	3.1	-----	542.	-----	486.	-----
34.7	0.91	-----	3.4	-----	516.	-----	444.
	-----	0.0	-----	162.	-----	161.	-----
26.7	-----	-----	0.0	-----	258.	-----	161.
	1.91	18.6	-----	120.	-----	120.	-----
32.6	2.54	-----	8.4	-----	209.	-----	195.
	3.59	14.7	-----	191.	-----	99.	-----
34.9	3.64	-----	6.6	-----	273.	-----	165.
	3.64	11.2	-----	389.	-----	160.	-----
37.0	3.55	-----	5.0	-----	392.	-----	198.
	3.23	8.7	-----	442.	-----	263.	-----
37.7	3.09	-----	4.0	-----	426.	-----	254.
	2.68	7.0	-----	452.	-----	314.	-----
38.6	2.65	-----	3.9	-----	436.	-----	283.
	1.96	5.3	-----	451.	-----	322.	-----
36.7	1.87	-----	2.3	-----	435.	-----	285.

J

AFF-124

DIESEL, VARIABLE NOX
1981 SEPTEMBER 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		#PART>1 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	AER. PART/ TSI-023
1 745	-135	0.	0.	0.2	0.2	4.	4.	159
1 935	-25	234.	-----	40.0	-----	30.	-----	3.5E
1 945	-15	-----	134.	-----	30.0	-----	21.	-----
1 1105	65	176.	-----	46.0	-----	41.	-----	2.9E
1 1115	75	-----	155.	-----	50.0	-----	50.	-----
1 1205	125	213.	-----	70.0	-----	62.	-----	3.9E
1 1215	135	-----	241.	-----	80.0	-----	50.	-----
1 1305	185	295.	-----	100.0 A	-----	61.	-----	3.5E
1 1315	195	-----	272.	-----	99.0	-----	56.	-----
1 1405	245	323.	-----	100.0 A	-----	100.	-----	6.3E
1 1415	255	-----	266.	-----	90.0	-----	65.	-----
1 1505	305	319.	-----	93.0	-----	71.	-----	4.5E
1 1515	315	-----	250.	-----	81.0	-----	51.	-----
1 1605	365	301.	-----	78.0	-----	68.	-----	3.5E
1 1615	375	-----	230.	-----	70.0	-----	42.	-----
2 835	1355	11.	-----	3.4	-----	16.	-----	1839
2 845	1365	-----	9.	-----	4.9	-----	4.	-----
2 1005	1445	8.	-----	5.1	-----	32.	-----	4.4E
2 1015	1455	-----	13.	-----	6.7	-----	15.	-----
2 1105	1505	10.	-----	14.0	-----	37.	-----	5.8E
2 1115	1515	-----	13.	-----	14.0	-----	17.	-----
2 1205	1565	20.	-----	27.0	-----	46.	-----	5.5E
2 1215	1575	-----	23.	-----	23.0	-----	19.	-----
2 1305	1625	40.	-----	38.0	-----	45.	-----	5.2E
2 1315	1635	-----	39.	-----	28.0	-----	23.	-----
2 1405	1685	68.	-----	48.0	-----	33.	-----	4.7E
2 1415	1695	-----	53.	-----	33.0	-----	16.	-----
2 1505	1745	80.	-----	48.0	-----	43.	-----	7.7E
2 1515	1755	-----	55.	-----	30.0	-----	35.	-----

----- NO DATA TAKEN

582

12 NOV 1981
PAGE 5

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
2	AER.V	AER.V	AER.N	AER.N	AER.S	AER.S
AT	UM3/CC	UM3/CC	PART/CC	PART/CC	UM2/CC	UM2/CC
M-1						
388	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023

2	4.	4.	159.	159.	38.	38.
--	30.	----	3.5E 04	-----	925.	-----
0	----	21.	----	2.2E 04	-----	709.
0	----	41.	----	2.9E 04	-----	1288.
0	----	50.	----	4.0E 04	-----	1487.
--	62.	----	3.9E 04	-----	1827.	-----
0	----	50.	----	5.0E 04	-----	1812.
--	61.	----	3.5E 04	-----	2012.	-----
0	----	56.	----	6.4E 04	-----	1895.
--	100.	----	6.3E 04	-----	2127.	-----
0	----	65.	----	4.8E 04	-----	1671.
--	71.	----	4.5E 04	-----	1729.	-----
0	----	51.	----	4.2E 04	-----	1441.
--	68.	----	3.5E 04	-----	1540.	-----
0	----	42.	----	2.8E 04	-----	1210.
--	16.	----	1839.	-----	168.	-----
9	----	4.	----	857.	-----	83.
--	32.	----	4.4E 04	-----	1023.	-----
.7	----	15.	----	2.8E 04	-----	620.
--	37.	----	5.8E 04	-----	1386.	-----
0	----	17.	----	3.0E 04	-----	690.
--	46.	----	5.5E 04	-----	1561.	-----
0	----	19.	----	2.7E 04	-----	799.
--	45.	----	5.2E 04	-----	1579.	-----
0	----	23.	----	2.7E 04	-----	806.
--	33.	----	4.7E 04	-----	1250.	-----
0	----	16.	----	1.8E 04	-----	685.
--	43.	----	7.7E 04	-----	1201.	-----
0	----	35.	----	2.3E 04	-----	747.

Z

AFF-124
 DIESEL, VARIABLE NOX
 1981 SEPTEMBER 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C10 VAR 3700	SIDE 2 N-C10 VAR 3700	SIDE 1 N-C11 VAR 3700	SIDE 2 N-C11 VAR 3700	SIDE 1 N-C12 VAR 3700	SIDE 2 N-C12 VAR 3700	SIDE 1 N-C1 VAR 3700
		PPM	PPM	PPM	PPM	PPM	PPM	PPM
1 835	-85	0.0098	-----	0.0099	-----	0.0194	-----	0.03
1 945	-15	-----	0.0054	-----	0.0108	-----	0.0133	-----
1 1005	5	0.0055	-----	0.0089	-----	0.0134	-----	0.01
1 1215	135	-----	0.0051	-----	0.0088	-----	0.0128	-----
1 1505	305	-----	-----	-----	-----	-----	-----	-----
1 1615	375	-----	0.0049	-----	0.0080	-----	0.0113	-----
2 730	1290	0.0067	-----	0.0089	-----	0.0156	-----	0.01
2 845	1365	-----	0.0045	-----	0.0079	-----	0.0120	-----
2 1005	1445	0.0056	-----	0.0078	-----	0.0104	-----	0.02
2 1115	1515	-----	-----	-----	-----	-----	-----	-----
2 1205	1565	0.0050	-----	0.0073	-----	0.0101	-----	0.01
2 1405	1685	0.0045	-----	0.0069	-----	0.0092	-----	0.01
2 1515	1755	-----	0.0049	-----	0.0075	-----	0.0104	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700	SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700
-	0.0194	-----	0.0385	-----	0.0554	-----
8	-----	0.0133	-----	0.0286	-----	0.0476
-	0.0134	-----	0.0265	-----	0.0376	-----
8	-----	0.0128	-----	0.0238	-----	0.0388
-	-----	-----	-----	-----	-----	-----
0	-----	0.0113	-----	0.0190	-----	0.0243
-	0.0156	-----	0.0234	-----	0.0259	-----
9	-----	0.0120	-----	0.0205	-----	0.0231
-	0.0104	-----	0.0236	-----	0.0258	-----
-	-----	-----	-----	-----	-----	-----
-	0.0101	-----	0.0182	-----	0.0226	-----
-	0.0092	-----	0.0164	-----	0.0204	-----
5	-----	0.0104	-----	0.0170	-----	0.0242

2

AFF-124

DIESEL, VARIABLE NOX
1981 SEPTEMBER 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		N-C15 PPM VAR 3700	N-C15 PPM VAR 3700	CO PPM BYRON	CO PPM BYRON	PAN PPM ECD-3	PAN PPM ECD-3	HC PP C
1 745	-135	-----	-----	1.32	1.32	0.000	0.000	---
1 835	-85	0.0845	-----	-----	-----	-----	-----	---
1 935	-25	-----	-----	1.27	-----	0.001	-----	0.
1 945	-15	-----	0.0705	-----	1.42	-----	0.000	---
1 1005	5	0.0683	-----	-----	-----	-----	-----	---
1 1105	65	-----	-----	1.30	-----	0.002	-----	---
1 1115	75	-----	-----	-----	1.53	-----	0.010	---
1 1200	120	-----	-----	-----	-----	-----	-----	0.
1 1205	125	-----	-----	1.70	-----	0.015	-----	---
1 1215	135	-----	0.0635	-----	1.67	-----	0.028	---
1 1305	185	-----	-----	1.45	-----	0.038	-----	---
1 1315	195	-----	-----	-----	1.70	-----	0.037	---
1 1405	245	-----	-----	1.78	-----	0.055	-----	---
1 1415	255	-----	-----	-----	1.90	-----	0.041	---
1 1505	305	-----	-----	1.62	-----	0.061	-----	---
1 1515	315	-----	-----	-----	1.79	-----	0.039	---
1 1600	360	-----	-----	-----	-----	-----	-----	0.
1 1605	365	-----	-----	2.05	-----	0.057	-----	---
1 1615	375	-----	0.0499	-----	1.84	-----	0.035	---
584	2 730	1290	0.0394	-----	-----	-----	-----	---
	2 815	1335	-----	-----	-----	-----	-----	0.
	2 835	1355	-----	-----	1.96	-----	0.013	---
	2 845	1365	-----	0.0369	-----	1.85	-----	0.006
	2 1005	1445	0.0392	-----	2.21	-----	0.023	---
	2 1015	1455	-----	-----	-----	2.00	-----	0.017
	2 1105	1505	-----	-----	2.24	-----	0.026	---
	2 1115	1515	-----	-----	-----	2.05	-----	0.018
	2 1200	1560	-----	-----	-----	-----	-----	0.
	2 1205	1565	0.0336	-----	2.16	-----	0.027	---
	2 1215	1575	-----	-----	-----	1.92	-----	0.017
	2 1305	1625	-----	2.03	-----	0.025	-----	---
	2 1315	1635	-----	-----	-----	2.07	-----	0.015
	2 1405	1685	0.0312	-----	2.30	-----	0.025	---
	2 1415	1695	-----	-----	-----	2.29	-----	0.015
	2 1505	1745	-----	2.26	-----	0.023	-----	---
	2 1510	1750	-----	-----	-----	-----	-----	0.
	2 1515	1755	-----	0.0324	-----	2.41	-----	0.014

----- NO DATA TAKEN

12 NOV 1981

PAGE 7

SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
0.000	0.000	-----	-----	-334.	-334.
-----	-----	-----	-----	-----	-----
0.001	-----	0.036	0.000	1.5E 04	-----
-----	0.000	-----	-----	-----	3173.
-----	-----	-----	-----	-----	-----
0.002	-----	-----	-----	167.	-----
-----	0.010	-----	-----	-----	7849.
-----	-----	0.029	0.021	-----	-----
0.015	-----	-----	-----	9018.	-----
-----	0.028	-----	-----	-----	1.7E 04
0.038	-----	-----	-----	501.	-----
-----	0.037	-----	-----	-----	3.3E 04
0.055	-----	-----	-----	4.7E 04	-----
-----	0.041	-----	-----	-----	3.1E 04
0.061	-----	-----	-----	3.3E 04	-----
-----	0.039	-----	-----	-----	2.6E 04
-----	-----	0.088	0.044	-----	-----
0.057	-----	-----	-----	2.1E 04	-----
-----	0.035	-----	-----	-----	1.3E 04
-----	-----	-----	-----	-----	-----
-----	-----	0.172	0.040	-----	-----
0.013	-----	-----	-----	501.	-----
-----	0.006	-----	-----	-----	334.
0.023	-----	-----	-----	8350.	-----
-----	0.017	-----	-----	-----	1.0E 04
0.026	-----	-----	-----	1.7E 04	-----
-----	0.018	-----	-----	-----	1.1E 04
-----	-----	0.121	0.056	-----	-----
0.027	-----	-----	-----	8183.	-----
-----	0.017	-----	-----	-----	4509.
0.025	-----	-----	-----	2.3E 04	-----
-----	0.015	-----	-----	-----	1.3E 04
0.025	-----	-----	-----	2.1E 04	-----
-----	0.015	-----	-----	-----	7181.
0.023	-----	-----	-----	4.8E 04	-----
-----	-----	0.130	0.056	-----	-----
-----	0.014	-----	-----	-----	1.1E 04

J

AFF-124
 DIESEL, VARIABLE NOX
 1981 SEPTEMBER 1

CLOCK DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE PART. TSI-0
1 745	-135	435.	435.	89.	89.	-48.	-48.	-49
1 935	-25	3480.	-----	6749.	-----	8700.	-----	873
1 945	-15	-----	3132.	-----	8924.	-----	6507.	---
1 1105	65	2436.	-----	1.4E 04	-----	1.1E 04	-----	1599
1 1115	75	-----	2436.	-----	1.4E 04	-----	1.5E 04	---
1 1205	125	-261.	-----	1.0E 04	-----	1.7E 04	-----	2706
1 1215	135	-----	174.	-----	1.1E 04	-----	2.0E 04	---
1 1305	185	2697.	-----	7148.	-----	2.2E 04	-----	2841
1 1315	195	-----	-696.	-----	8836.	-----	1.9E 04	---
1 1405	245	-435.	-----	1421.	-----	9447.	-----	5277
1 1415	255	-----	-2001.	-----	3152.	-----	1.1E 04	---
1 1505	305	-6438.	-----	1865.	-----	1.3E 04	-----	3493
1 1515	315	-----	-609.	-----	2442.	-----	1.1E 04	---
1 1605	365	957.	-----	311.	-----	9182.	-----	3100
1 1615	375	-----	2523.	-----	755.	-----	9785.	---
2 835	1355	957.	-----	-133.	-----	313.	-----	111
2 845	1365	-----	-87.	-----	-178.	-----	578.	---
2 1005	1445	8091.	-----	2.1E 04	-----	6049.	-----	554
2 1015	1455	-----	1740.	-----	9946.	-----	5808.	---
2 1105	1505	2175.	-----	2.6E 04	-----	1.1E 04	-----	947
2 1115	1515	-----	1740.	-----	1.0E 04	-----	6290.	---
2 1205	1565	7047.	-----	2.7E 04	-----	1.2E 04	-----	1132
2 1215	1575	-----	2436.	-----	1.1E 04	-----	8146.	---
2 1305	1625	609.	-----	1.1E 04	-----	1.6E 04	-----	1845
2 1315	1635	-----	174.	-----	5284.	-----	8290.	---
2 1405	1685	-6438.	-----	2.0E 04	-----	1.2E 04	-----	873
2 1415	1695	-----	-5220.	-----	7370.	-----	8122.	---
2 1505	1745	8874.	-----	1.1E 04	-----	7326.	-----	1587
2 1515	1755	-----	-522.	-----	5950.	-----	5519.	---

----- NO DATA TAKEN

585

12 NOV 1981
PAGE 8

DE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
T.075	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
T/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
89.	-48.	-48.	-49.	-49.	60.	60.
-----	8700.	-----	873.	-----	107.	-----
24.	-----	6507.	-----	554.	-----	33.
-----	1.1E 04	-----	1599.	-----	140.	-----
4E 04	-----	1.5E 04	-----	1365.	-----	33.
-----	1.7E 04	-----	2706.	-----	167	-----
1E 04	-----	2.0E 04	-----	2177.	-----	200.
-----	2.2E 04	-----	2841.	-----	187.	-----
36.	-----	1.9E 04	-----	2964.	-----	93.
-----	9447.	-----	5277.	-----	660.	-----
52.	-----	1.1E 04	-----	3702.	-----	440.
-----	1.3E 04	-----	3493.	-----	454.	-----
42.	-----	1.1E 04	-----	3013.	-----	313.
-----	9182.	-----	3100.	-----	647.	-----
55.	-----	9785.	-----	2583.	-----	267.
-----	313.	-----	111.	-----	27.	-----
78.	-----	578.	-----	165.	-----	44.
-----	6049.	-----	554.	-----	147.	-----
46.	-----	5808.	-----	357.	-----	33.
-----	1.1E 04	-----	947.	-----	113.	-----
0E 04	-----	6290.	-----	541.	-----	47.
-----	1.2E 04	-----	1132.	-----	153.	-----
1E 04	-----	8146.	-----	529.	-----	40.
-----	1.6E 04	-----	1845.	-----	273.	-----
84.	-----	8290.	-----	898.	-----	127.
-----	1.2E 04	-----	873.	-----	67.	-----
70.	-----	8122.	-----	676.	-----	0.
-----	7326.	-----	1587.	-----	140.	-----
50.	-----	5519.	-----	553.	-----	160.

2

AFF-124

DIESEL, VARIABLE NOX
1981 SEPTEMBER 1

		SIDE 1	SIDE 2
CLOCK	ELAPSED	PART.750	PART.750
TIME	TIME	PART/CC	PART/CC
BY HR.	(MIN)	TSI-023	TSI-023

1	745	-135	7.
1	935	-25	35.
1	945	-15	-----
1	1105	65	35.
1	1115	75	-----
1	1205	125	60.
1	1215	135	-----
1	1305	185	25.
1	1315	195	-----
1	1405	245	112.
1	1415	255	-----
1	1505	305	56.
1	1515	315	-----
1	1605	365	42.
1	1615	375	-----
2	835	1355	63.
2	845	1365	-----
2	1005	1445	46.
2	1015	1455	-----
2	1105	1505	28.
2	1115	1515	-----
2	1205	1565	53.
2	1215	1575	-----
2	1305	1625	0.
2	1315	1635	-----
2	1405	1685	25.
2	1415	1695	-----
2	1505	1745	63.
2	1515	1755	-----

----- NO DATA TAKEN

NOTES

A ACTUALLY >100

586

AFF-125
DIESEL, VARIABLE FUEL
1981 SEPTEMBER 3

DAY 1 (SEPT. 3)

~0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 9.0 C
DRY BULB: 19.3 C R.H.=21% DEW POINT: -3.6
0556: END FILL.
0628: INJECTED 5.0 ML. NO₂.
0630: INJECTED 18.0 ML. NO.
0634: MIX AND DIVIDE BAG.
0645: SIMULTANEOUSLY INJECTED 550 MICROLITERS OF DIESEL FUEL
INTO SIDE A AND 275 MICROLITERS DIESEL FUEL INTO SIDE
B AT 250 DEGREES C FOR 30 MINUTES.
0720: MIX SIDE A, SIDE B.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HOT.
1620: END SAMPLING, DAY 1.
DAY 2 (SEPT. 4)
0900: UNCOVER BAG.
0905: WEATHER: SUNNY AND HAZY.
1520: END SAMPLING, END RUN.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	34(+/-3)	34(+/-3)
AVG.UV(MW/CM ²)	2.5(+/-0.9)	2.6(+/-0.6)

T=0 AT 900 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	31.8	5.6	DEG C	SIDE 1
T	DORIC-1	32.4	5.1	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.56	0.75	MW/CM ²	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.359	PPM	SIDE 1
NO	B-NOX-1	0.362	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.119	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.118	PPM	SIDE 2
THC	BK6800-1	6.09	PPMC	SIDE 1
THC	BK6800-1	4.13	PPMC	SIDE 2

AFF-125
DIESEL, VARIABLE FUEL
1981 SEPTEMBER 3

INSTRUMENTS USED		SAMPLING RATE (ML/MIN)
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX B101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12% 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-125
 DIESEL, VARIABLE FUEL
 1981 SEPTEMBER 3

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX- PP B-NO		
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.
1 835	-25	0.035	-----	0.359	-----	0.119	-----	-----	-----	0.
1 845	-15	-----	0.038	-----	0.362	-----	0.118	-----	-----	---
1 1005	65	0.052	-----	0.113	-----	0.312	-----	-----	-----	0.
1 1015	75	-----	0.023	-----	0.199	-----	0.238	-----	-----	---
1 1105	125	0.157	-----	0.021	-----	0.360	-----	-----	-----	0.
1 1115	135	-----	0.044	-----	0.075	-----	0.337	-----	-----	---
1 1205	185	0.321	-----	0.005	-----	0.277	-----	-----	-----	0.
1 1215	195	-----	0.138	-----	0.020	-----	0.354	-----	-----	---
1 1305	245	0.464	-----	0.005	-----	0.183	-----	-----	-----	0.
1 1315	255	-----	0.259	-----	0.009	-----	0.302	-----	-----	---
1 1405	305	0.528	-----	0.006	-----	0.117	-----	-----	-----	0.
1 1415	315	-----	0.375	-----	0.006	-----	0.236	-----	-----	---
1 1505	365	0.520	-----	0.004	-----	0.087	-----	-----	-----	0.
1 1515	375	-----	0.445	-----	0.003	-----	0.179	-----	-----	---
1 1605	425	0.484	-----	0.001	-----	0.075	-----	-----	-----	0.
1 1615	435	-----	0.451	-----	0.005	-----	0.142	-----	-----	---
2 875	1415	0.293	-----	0.001	-----	0.033	-----	-----	-----	0.
2 845	1425	-----	0.246	-----	0.001	-----	0.038	-----	-----	---
2 1005	1505	0.269	-----	0.002	-----	0.040	-----	-----	-----	0.
2 1015	1515	-----	0.242	-----	0.002	-----	0.050	-----	-----	---
2 1105	1565	0.265	-----	0.002	-----	0.046	-----	-----	-----	0.
2 1115	1575	-----	0.261	-----	0.002	-----	0.056	-----	-----	---
2 1205	1625	0.266	-----	0.000	-----	0.051	-----	-----	-----	0.
2 1215	1635	-----	0.287	-----	0.001	-----	0.055	-----	-----	---
2 1305	1685	0.275	-----	0.003	-----	0.050	-----	-----	-----	0.
2 1315	1695	-----	0.308	-----	0.003	-----	0.061	-----	-----	---
2 1405	1745	0.274	-----	0.003	-----	0.051	-----	-----	-----	0.
2 1415	1755	-----	0.320	-----	0.003	-----	0.053	-----	-----	---
2 1505	1805	0.285	-----	0.000	-----	0.050	-----	-----	-----	0.
2 1515	1815	-----	0.315	-----	0.003	-----	0.058	-----	-----	---

----- NO DATA TAKEN

589

12 NOV 1981

PAGE 3

	SIDE 1 NO ₂ -UNC PPM B-NOX-1	SIDE 2 NO ₂ -UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON
000	0.000	0.000	0.000	0.000	0.30	0.30
--	0.119	----	0.489	----	11.10	----
362	----	0.118	----	0.492	----	4.20
--	0.312	----	0.448	----	9.20	----
199	----	0.238	----	0.457	----	6.30
--	0.360	----	0.382	----	9.80	----
075	----	0.337	----	0.424	----	7.20
--	0.277	----	0.284	----	10.90	----
020	----	0.354	----	0.375	----	4.30
--	0.183	----	0.188	----	9.20	----
009	----	0.302	----	0.311	----	4.60
--	0.117	----	0.121	----	7.50	----
006	----	0.236	----	0.240	----	5.30
--	0.087	----	0.090	----	9.10	----
003	----	0.179	----	0.182	----	-----
--	0.075	----	0.078	----	8.20 C	-----
005	----	0.142	----	0.147	----	4.80 C
--	0.033	----	0.036	----	-----	-----
001	----	0.038	----	0.039	----	-----
--	0.040	----	0.042	----	-----	-----
002	----	0.050	----	0.051	----	-----
--	0.046	----	0.049	----	-----	-----
002	----	0.056	----	0.058	----	-----
--	0.051	----	0.054	----	-----	-----
001	----	0.055	----	0.057	----	-----
--	0.050	----	0.053	----	-----	-----
003	----	0.061	----	0.062	----	-----
--	0.051	----	0.053	----	-----	-----
003	----	0.053	----	0.057	----	-----
--	0.050	----	0.052	----	-----	-----
003	----	0.058	----	0.059	----	-----

J

AFF-125
DIESEL, VARIABLE FUEL
1981 SEPTEMBER 3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2	
		THC PPMC	BK6800-1	THC PPMC	BK6800-1	T DEG C	DORIC-1	T DEG C	DORIC-1	UV RAD MW/CM2	EPPLEY-2	CONDENS 10E3/CC	CNC-143
1 605	-175	2.67		2.67		18.8		18.8		-----	0.4		0.
1 835	-25	6.09		-----		24.6		-----		-----	10.3		-----
1 845	-15	-----		4.13		-----		27.5		-----	-----		20.
1 1005	65	7.16		-----		29.5		-----		2.00	9.7		-----
1 1015	75	-----		4.69		-----		31.6		2.50	-----		16.
1 1105	125	6.86		-----		32.5		-----		3.28	8.7		-----
1 1115	135	-----		5.05		-----		33.0		3.37	-----		13.
1 1205	185	8.44		-----		35.0		-----		3.64	7.7		-----
1 1215	195	-----		6.28		-----		35.6		3.55	-----		10.
1 1305	245	7.55		-----		37.0		-----		3.09	7.0		-----
1 1315	255	-----		5.24		-----		37.6		3.00	-----		8.
1 1405	305	6.94		-----		37.1		-----		2.68	6.0		-----
1 1415	315	-----		5.43		-----		36.1		2.62	-----		7.
1 1505	365	7.24		-----		34.8		-----		2.00	4.8		-----
1 1515	375	-----		5.84		-----		34.1		1.82	-----		6.
1 1605	425	7.71		-----		32.4		-----		1.09	3.6		-----
1 1615	435	-----		5.33		-----		31.0		0.91	-----		4.
2 835	1415	5.47		-----		23.0		-----		-----	0.2		-----
2 845	1425	-----		5.00		-----		25.0		-----	-----		0.
2 1005	1505	5.51		-----		28.2		-----		1.96	10.0		-----
2 1015	1515	-----		4.45		-----		29.6		2.45	-----		12.
2 1105	1565	5.43		-----		31.8		-----		3.23	7.3		-----
2 1115	1575	-----		3.90		-----		32.7		3.19	-----		8.
2 1205	1625	6.91		-----		34.0		-----		3.00	5.7		-----
2 1215	1635	-----		4.50		-----		35.0		3.28	-----		6.
2 1305	1685	6.63		-----		37.0		-----		3.19	4.1		-----
2 1315	1695	-----		4.64		-----		37.4		2.73	-----		5.
2 1405	1745	7.71		-----		37.2		-----		2.41	4.0		-----
2 1415	1755	-----		5.12		-----		36.7		2.32	-----		4.
2 1505	1805	6.22		-----		36.5		-----		1.64	2.9		-----
2 1515	1815	-----		5.43		-----		36.4		1.50	-----		3.

----- NO DATA TAKEN

12 NOV 1981

PAGE 4

E 2 G C C-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
.8	-----	0.4	0.4	0.	0.	0.	0.
---	-----	10.3	-----	529.	-----	499.	-----
.5	-----	-----	20.8	-----	447.	-----	298.
---	2.00	9.7	-----	528.	-----	482.	-----
.6	2.50	-----	16.0	-----	437.	-----	267.
---	3.28	6.7	-----	528.	-----	470.	-----
.0	3.37	-----	13.0	-----	454.	-----	309.
---	3.64	7.7	-----	525.	-----	473.	-----
.6	3.55	-----	10.0	-----	472.	-----	357.
---	3.09	7.0	-----	533.	-----	488.	-----
.6	3.00	-----	8.6	-----	486.	-----	396.
---	2.68	6.0	-----	536.	-----	494.	-----
.1	2.62	-----	7.2	-----	493.	-----	420.
---	2.00	4.8	-----	537.	-----	491.	-----
.1	1.82	-----	6.4	-----	457.	-----	432.
---	1.09	3.6	-----	534.	-----	481.	-----
.0	0.91	-----	4.5	-----	498.	-----	432.
---	-----	0.2	-----	217.	-----	165.	-----
.0	-----	-----	0.2	-----	333.	-----	189.
---	1.96	10.0	-----	166.	-----	165.	-----
.6	2.45	-----	12.0	-----	272.	-----	249.
---	3.23	7.3	-----	246.	-----	138.	-----
.7	3.19	-----	8.0	-----	291.	-----	212.
---	3.00	5.7	-----	403.	-----	207.	-----
.0	3.28	-----	6.3	-----	398.	-----	219.
---	3.19	4.1	-----	442.	-----	291.	-----
.4	2.73	-----	5.5	-----	436.	-----	270.
---	2.41	4.0	-----	450.	-----	325.	-----
.7	2.32	-----	4.6	-----	444.	-----	297.
---	1.64	2.9	-----	451.	-----	328.	-----
.4	1.50	-----	3.6	-----	443.	-----	302.

J

AFF-125
 DIESEL, VARIABLE FUEL
 1981 SEPTEMBER 3

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		#PART>1 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT MRI-388	10-4 M-1 MRI-388	10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023
1 605	-175	0.	0.	0.2	0.2	1.	1.	260
1 835	-25	373.	-----	100.0 A	-----	83.	-----	1.3
1 845	-15	-----	50.	-----	25.0	-----	29.	-----
1 1005	65	315.	-----	87.0	-----	95.	-----	9.71
1 1015	75	-----	35.	-----	33.0	-----	40.	-----
1 1105	125	282.	-----	88.0	-----	103.	-----	9.51
1 1115	135	-----	63.	-----	45.0	-----	35.	-----
1 1205	185	294.	-----	98.0	-----	117.	-----	9.61
1 1215	195	-----	109.	-----	60.0	-----	65.	-----
1 1305	245	328.	-----	100.0 A	-----	119.	-----	1.01
1 1315	255	-----	163.	-----	77.0	-----	71.	-----
1 1405	305	338.	-----	100.0 A	-----	118.	-----	8.11
1 1415	315	-----	208.	-----	88.0	-----	73.	-----
1 1505	365	327.	-----	98.0	-----	102.	-----	7.91
1 1515	375	-----	229.	-----	87.0	-----	85.	-----
1 1605	425	303.	-----	84.0	-----	87.	-----	6.41
1 1615	435	-----	227.	-----	80.0	-----	63.	-----
2 835	1415	11.	-----	4.4	-----	5.	-----	280
2 845	1425	-----	16.	-----	6.9	-----	5.	-----
2 1005	1505	13.	-----	5.4	-----	30.	-----	4.21
2 1015	1515	-----	24.	-----	7.7	-----	29.	-----
2 1105	1565	15.	-----	14.0	-----	38.	-----	5.11
2 1115	1575	-----	22.	-----	15.0	-----	30.	-----
2 1205	1625	24.	-----	26.0	-----	47.	-----	1.51
2 1215	1635	-----	31.	-----	25.0	-----	31.	-----
2 1305	1685	58.	-----	36.0	-----	48.	-----	5.31
2 1315	1695	-----	47.	-----	32.0	-----	49.	-----
2 1405	1745	88.	-----	46.0	-----	71.	-----	3.91
2 1415	1755	-----	63.	-----	37.0	-----	52.	-----
2 1505	1805	89.	-----	43.0	-----	46.	-----	4.01
2 1515	1815	-----	67.	-----	37.0	-----	42.	-----

----- NO DATA TAKEN

501

	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UMJ/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023
1.	2609.	2609.	12.	12.		
83.	----- 29.	1.3E 05 -----	----- 7.1E 04	2477. -----	----- 932.	
95.	-----	9.7E 04	-----	2114. -----	-----	
40.	-----	6.8E 04	-----	2237. -----	1212. -----	
103.	-----	9.5E 04	-----	2237. -----	1318. -----	
35.	-----	7.8E 04	-----	2511. -----	1823. -----	
117.	-----	9.6E 04	-----	2410. -----	1681. -----	
65.	-----	7.5E 04	-----	2407. -----	1809. -----	
119.	-----	1.0E 05	-----	2511. -----	1823. -----	
71.	-----	8.0E 04	-----	2407. -----	1809. -----	
118.	-----	8.1E 04	-----	2407. -----	1809. -----	
73.	-----	7.9E 04	-----	1915. -----	1755. -----	
102.	-----	7.9E 04	-----	1915. -----	1755. -----	
85.	-----	6.5E 04	-----	1533. -----	1425. -----	
87.	-----	6.4E 04	-----	1533. -----	1425. -----	
63.	-----	5.5E 04	-----	1533. -----	1425. -----	
5.	-----	2800.	-----	87. -----	-----	
30.	-----	5.	5007. -----	-----	113. -----	
29.	-----	4.2E 04	-----	695. -----	733. -----	
38.	-----	4.0E 04	-----	962. -----	900. -----	
30.	-----	5.1E 04	-----	962. -----	900. -----	
47.	-----	4.8E 04	-----	1041. -----	-----	
31.	-----	1.5E 04	-----	1041. -----	893. -----	
48.	-----	3.5E 04	-----	1144. -----	1089. -----	
49.	-----	5.3E 04	-----	1144. -----	1089. -----	
71.	-----	4.6E 04	-----	1223. -----	1046. -----	
52.	-----	3.9E 04	-----	1223. -----	1046. -----	
46.	-----	4.2E 04	-----	927. -----	827. -----	
42.	-----	3.4E 04	-----	927. -----	827. -----	

J

AFF-125

DIESEL, VARIABLE FUEL
1981 SEPTEMBER 3

CLOCK TIME DY	ELAPSED TIME HR.	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SID PP VAR
		N-C10 PPM (MIN)	VAR 3700	N-C10 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C PP
1 730	-90	0.0060	B	-----	0.0101	B	-----	0.0113	B	-----	0.0	-----		
1 845	-15	-----	-----	-----	-----	0.0046	-----	-----	0.0073	-----	---	-----		
1 1005	65	0.0054	-----	-----	0.0090	-----	-----	0.0120	-----	-----	0.0	-----		
1 1115	135	-----	-----	-----	-----	0.0049	-----	-----	0.0079	-----	---	-----		
1 1205	185	0.0048	-----	-----	0.0075	-----	-----	0.0113	-----	-----	0.0	-----		
1 1315	255	-----	-----	-----	-----	-----	-----	-----	0.0066	-----	---	-----		
1 1505	365	0.0045	-----	-----	0.0073	-----	-----	0.0098	-----	-----	0.0	-----		
1 1615	435	-----	-----	-----	-----	-----	-----	-----	0.0068	-----	---	-----		
2 730	1350	0.0064	-----	-----	0.0077	-----	0.0151	-----	-----	0.0068	B	-----	0.0	
2 845	1425	-----	0.0056	B	-----	0.0046	B	-----	0.0089	-----	-----	0.0	-----	
2 1005	1505	-----	-----	-----	0.0068	-----	-----	-----	-----	0.0056	---	-----	---	
2 1115	1575	-----	-----	-----	-----	-----	-----	-----	-----	0.0051	---	-----	---	
2 1215	1635	-----	-----	-----	-----	-----	-----	-----	-----	0.0050	---	-----	---	
2 1405	1745	0.0049	-----	-----	0.0067	-----	0.0104	-----	-----	-----	-----	-----	0.0	
2 1515	1815	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---	

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700	SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700
	0.0113 B	-----	0.0213 B	-----	0.0239 B	-----
	-----	0.0073	-----	0.0147	-----	0.0190
	0.0120	-----	0.0233	-----	0.0300	-----
	-----	0.0079	-----	0.0147	-----	0.0243
	0.0113	-----	0.0213	-----	0.0258	-----
	-----	0.0066	-----	0.0132	-----	0.0236
	0.0098	-----	0.0167	-----	0.0253	-----
	-----	0.0068	-----	0.0114	-----	0.0352
	0.0151	-----	0.0238	-----	0.0243	-----
B	-----	0.0068 B	-----	0.0113 B	-----	0.0130 B
	0.0089	-----	0.0162	-----	0.0232	-----
	-----	0.0056	-----	0.0101	-----	0.0150
	-----	0.0051	-----	0.0095	-----	0.0116
	0.0104	-----	0.0143	-----	0.0162	-----
	-----	0.0050	-----	0.0089	-----	0.0097

AFF-125
 DIESEL, VARIABLE FUEL
 1981 SEPTEMBER 3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE
		N-C15 VAR	PPM 3700	N-C15 VAR	PPM 3700	CO BYRON	PPM	CO BYRON	PPM	PAN ECD-3	PPM	ECD-3	HCH PPM	CAN
1 605	-175	-----	-----	0.22	-----	0.22	-----	0.000	-----	0.000	-----	0.000	-----	
1 730	-90	0.0373	B	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1 810	-50	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0	
1 835	-25	-----	-----	0.14	-----	-----	-----	0.000	-----	-----	-----	-----	-----	
1 845	-15	-----	0.0337	-----	0.22	-----	0.18	-----	0.004	-----	0.000	-----	-----	
1 1005	65	0.0535	-----	0.22	-----	0.37	-----	0.004	-----	0.003	-----	-----	-----	
1 1015	75	-----	-----	-----	0.12	-----	0.37	-----	0.017	-----	0.003	-----	-----	
1 1105	125	-----	-----	0.12	-----	0.30	-----	0.017	-----	0.007	-----	-----	-----	
1 1115	135	-----	0.0365	-----	0.30	-----	0.30	-----	0.007	-----	-----	-----	-----	
1 1200	180	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.0	-----	
1 1205	185	0.0435	-----	0.58	-----	0.34	-----	0.034	-----	-----	-----	-----	-----	
1 1215	195	-----	-----	-----	0.27	-----	0.27	-----	0.016	-----	-----	-----	-----	
1 1305	245	-----	-----	0.60	-----	0.49	-----	0.049	-----	0.028	-----	-----	-----	
1 1315	255	-----	0.0325	-----	0.41	-----	0.41	-----	0.028	-----	-----	-----	-----	
1 1405	305	-----	-----	0.51	-----	0.64	-----	0.064	-----	-----	-----	-----	-----	
1 1415	315	-----	-----	-----	0.57	-----	0.57	-----	0.042	-----	-----	-----	-----	
1 1505	365	0.0367	-----	0.72	-----	0.66	-----	0.066	-----	-----	-----	-----	-----	
1 1515	375	-----	-----	-----	0.54	-----	0.54	-----	0.055	-----	-----	-----	-----	
1 1605	425	-----	-----	0.48	-----	0.66	-----	0.066	-----	-----	-----	-----	-----	
1 1610	430	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.1	-----	
1 1615	435	-----	0.0318	-----	0.90	C	-----	0.061	-----	-----	-----	-----	-----	
2 730	1350	0.0426	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
2 810	1390	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.1	-----	
2 835	1415	-----	-----	-----	-----	-----	0.027	-----	-----	-----	-----	-----	-----	
2 845	1425	-----	0.0235	B	-----	-----	-----	-----	0.032	-----	-----	-----	-----	
2 1005	1505	0.0321	-----	-----	-----	-----	0.028	-----	-----	0.036	-----	-----	-----	
2 1015	1515	-----	-----	-----	-----	-----	0.032	-----	-----	0.040	-----	-----	0.1	
2 1105	1565	-----	-----	-----	-----	-----	0.032	-----	-----	0.038	-----	-----	-----	
2 1115	1575	-----	0.0250	-----	-----	-----	0.034	-----	-----	0.033	-----	-----	-----	
2 1200	1620	-----	-----	-----	-----	-----	0.029	-----	-----	0.027	-----	-----	0.1	
2 1205	1625	-----	-----	-----	-----	-----	0.027	-----	-----	0.033	-----	-----	-----	
2 1215	1635	-----	0.0192	-----	-----	-----	0.031	-----	-----	0.031	-----	-----	-----	
2 1305	1685	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
2 1315	1695	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
2 1405	1745	0.0265	-----	-----	-----	-----	0.029	-----	-----	0.033	-----	-----	-----	
2 1415	1755	-----	-----	-----	-----	-----	0.027	-----	-----	0.031	-----	-----	-----	
2 1505	1805	-----	-----	-----	-----	-----	0.027	-----	-----	0.031	-----	-----	-----	
2 1510	1810	-----	-----	-----	-----	-----	0.027	-----	-----	0.031	-----	-----	-----	
2 1515	1815	-----	0.0170	-----	-----	-----	0.031	-----	-----	0.031	-----	-----	-----	

----- NO DATA TAKEN

503

12 NOV 1981
PAGE 7

E 2 0 M ON	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
22	0.000	0.000	-----	-----	2004.	2004.
-----	-----	-----	0.025	0.006	-----	-----
-----	0.000	-----	-----	-----	9.4E 04	-----
18	-----	0.000	-----	-----	-----	4.6E 04
-----	0.004	-----	-----	-----	6.9E 04	-----
37	-----	0.003	-----	-----	-----	4.2E 04
-----	0.017	-----	-----	-----	6.7E 04	-----
30	-----	0.007	-----	-----	-----	4.6E 04
-----	-----	0.031	0.017	-----	-----	-----
-----	0.034	-----	-----	-----	7.1E 04	-----
27	-----	0.016	-----	-----	-----	5.3E 04
-----	0.049	-----	-----	-----	8.7E 04	-----
41	-----	0.028	-----	-----	-----	5.8E 04
-----	0.064	-----	-----	-----	5.8E 04	-----
57	-----	0.042	-----	-----	-----	6.1E 04
-----	0.066	-----	-----	-----	6.4E 04	-----
54	-----	0.055	-----	-----	-----	4.9E 04
-----	0.066	-----	-----	-----	5.0E 04	-----
-----	-----	0.105	0.042	-----	-----	-----
90 C	-----	0.061	-----	-----	-----	4.0E 04
-----	-----	-----	-----	-----	-----	-----
-----	-----	0.190	0.044	-----	-----	-----
0.027	-----	-----	-----	2505.	-----	-----
-----	0.032	-----	-----	-----	4008.	-----
0.028	-----	-----	-----	2.8E 04	-----	-----
-----	0.036	-----	-----	-----	2.3E 04	-----
0.032	-----	-----	-----	3.6E 04	-----	-----
-----	0.040	-----	-----	-----	3.2E 04	-----
-----	-----	0.123	0.050	-----	-----	-----
0.032	-----	-----	-----	1169.	-----	-----
-----	0.038	-----	-----	-----	1.8E 04	-----
0.034	-----	-----	-----	3.9E 04	-----	-----
-----	0.033	-----	-----	-----	3.3E 04	-----
0.029	-----	-----	-----	2.9E 04	-----	-----
-----	0.033	-----	-----	-----	3.2E 04	-----
0.027	-----	-----	0.136	0.073	-----	-----
-----	0.031	-----	-----	-----	2.6E 04	-----

2

AFF-125

DIESEL, VARIABLE FUEL
1981 SEPTEMBER 3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		PART.042 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART. PART/ TSI-023
1 605	-175	1131.	1131.	-1021.	-1021.	602.	602.	-111.
1 835	-25	1218.	-----	1.1E 04	-----	1.9E 04	-----	413.
1 845	-15	-----	1.0E 04	-----	8347.	-----	5567.	---
1 1005	65	1740.	-----	9946.	-----	1.2E 04	-----	377.
1 1015	75	-----	5829.	-----	1.1E 04	-----	7953.	---
1 1105	125	3306.	-----	8480.	-----	1.1E 04	-----	437.
1 1115	135	-----	8091.	-----	1.1E 04	-----	1.1E 04	---
1 1205	185	1218.	-----	6394.	-----	1.1E 04	-----	449.
1 1215	195	-----	87.	-----	7726.	-----	1.1E 04	---
1 1305	245	-4002.	-----	5639.	-----	9254.	-----	596.
1 1315	255	-----	-435.	-----	6749.	-----	1.1E 04	---
1 1405	305	-1305.	-----	9590.	-----	8411.	-----	495.
1 1415	315	-----	-1392.	-----	5195.	-----	1.0E 04	---
1 1505	365	2958.	-----	1510.	-----	5688.	-----	401.
1 1515	375	-----	1305.	-----	3064.	-----	7495.	---
1 1605	425	1392.	-----	6394.	-----	1494.	-----	312.
1 1615	435	-----	3393.	-----	444.	-----	7061.	---
2 835	1415	-696.	-----	844.	-----	-169.	-----	29.
2 845	1425	-----	87.	-----	178.	-----	434.	---
2 1005	1505	2349.	-----	7370.	-----	3904.	-----	49.
2 1015	1515	-----	2349.	-----	9146.	-----	4386.	---
2 1105	1565	348.	-----	6127.	-----	6314.	-----	139.
2 1115	1575	-----	261.	-----	7770.	-----	6700.	---
2 1205	1625	435.	-----	4262.	-----	6989.	-----	178.
2 1215	1635	-----	0.	-----	1.2E 04	-----	3615.	---
2 1305	1685	2262.	-----	2220.	-----	6338.	-----	221.
2 1315	1695	-----	609.	-----	3596.	-----	6676.	---
2 1405	1745	-174.	-----	2042.	-----	5181.	-----	194.
2 1415	1755	-----	-696.	-----	3152.	-----	5302.	---
2 1505	1805	957.	-----	1021.	-----	3856.	-----	193.
2 1515	1815	-----	-522.	-----	2176.	-----	4675.	---

----- NO DATA TAKEN

594

12 NOV 1981

PAGE 8

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
2	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
75	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
C	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
3						
	602.	602.	-111.	-111.	0.	0.
	1.9E 04	-----	4133.	-----	520.	-----
	-----	5567.	-----	1328.	-----	73.
	1.2E 04	-----	3776.	-----	207.	-----
04	-----	7953.	-----	1525.	-----	280.
	1.1E 04	-----	4379.	-----	554.	-----
04	-----	1.1E 04	-----	1451.	-----	180.
	1.1E 04	-----	4490.	-----	767.	-----
	-----	1.1E 04	-----	2767.	-----	434.
	9254.	-----	5965.	-----	814.	-----
	-----	1.1E 04	-----	3370.	-----	480.
	8411.	-----	4957.	-----	967.	-----
	-----	1.0E 04	-----	3788.	-----	500.
	5688.	-----	4010.	-----	840.	-----
	-----	7495.	-----	3444.	-----	734.
	1494.	-----	3124.	-----	814.	-----
	-----	7061.	-----	2940.	-----	614.
	-169.	-----	295.	-----	7.	-----
	-----	434.	-----	234.	-----	67.
	3904.	-----	492.	-----	167.	-----
	-----	4386.	-----	775.	-----	47.
	6314.	-----	1390.	-----	153.	-----
	-----	6700.	-----	1058.	-----	207.
	6989.	-----	1784.	-----	240.	-----
04	-----	3615.	-----	1427.	-----	367.
	6338.	-----	2214.	-----	380.	-----
	-----	6676.	-----	1820.	-----	233.
	5181.	-----	1943.	-----	427.	-----
	-----	5302.	-----	1968.	-----	207.
	3856.	-----	1931.	-----	293.	-----
	-----	4675.	-----	1021.	-----	313.

7

AFF-125
DIESEL, VARIABLE FUEL
1981 SEPTEMBER 3

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2
		PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 605	-175	4.	4.
1 835	-25	35.	-----
1 845	-15	-----	35.
1 1005	65	193.	-----
1 1015	75	-----	25.
1 1105	125	158.	-----
1 1115	135	-----	4.
1 1205	185	183.	-----
1 1215	195	-----	56.
1 1305	245	147.	-----
1 1315	255	-----	60.
1 1405	305	147.	-----
1 1415	315	-----	60.
1 1505	365	151.	-----
1 1515	375	-----	98.
1 1605	425	133.	-----
1 1615	435	-----	42.
2 835	1415	14.	-----
2 845	1425	-----	0.
2 1005	1505	60.	-----
2 1015	1515	-----	63.
2 1105	1565	60.	-----
2 1115	1575	-----	18.
2 1205	1625	70.	-----
2 1215	1635	-----	0.
2 1305	1685	39.	-----
2 1315	1695	-----	81.
2 1405	1745	151.	-----
2 1415	1755	-----	102.
2 1505	1805	74.	-----
2 1515	1815	-----	74.

----- NO DATA TAKEN

NOTES

- A ACTUALLY >100
B PRESSURE ROSE, SO RETENTION TIMES ARE OFF (POSSIBLY AREAS ALSO)
C BYRON FLAME WENT OUT) TOOK SEVERAL HOURS TO STABILIZE. OFF FOR REST OF RUN.

AFF-126
PROPENE/NOX CONDITIONING
1981 SEPTEMBER 8

"0600: START PURGE.
0705: END PURGE, BAG DUMPED.
0722: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 18.5 C
DRY BULB: 32.0 C R.H.=26% DEW POINT: 9.6 C
0835: END FILL.
0849: INJECTED 12.0 ML. NO.
0851: INJECTED 11.0 ML. NO₂.
0853: INJECTED 22.5 ML. PROPENE.
0855: MIXED BAG.
0903: UNCOVER BAG (T=0).
WEATHER: HOT, CLEAR, AND SUNNY.
1400: RUN OVER.

T=0 AT 903 PST

BAG NO. 24 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	PENDIX 8101BX NOX ANALYZER: SN300038-2

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO ₂ -UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1
1 905	2	0.002	0.180	0.155	0.350
1 1400	297	0.787	0.000	0.147	0.150

----- NO DATA TAKEN

AFF-127
DIESEL VS JP-4(PET)
1981 SEPTEMBER 9

DAY 1 (SEPT. 9)

~ 0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 13.0 C
DRY BULB: 19.8 R.H.= 46% DEW POINT: 7.3 C
0559: END FILL.
0625: INJECTED 5.0 ML. NO₂.
0627: INJECTED 18.0 ML. NO.
0630: MIX AND DIVIDE BAG.
0645: INJECTED 550 MICROLITERS DIESEL INTO SIDE A AT
250 DEGREES C FOR 30 MINUTES.
0700: INJECTED 370 MICROLITERS JP-4(PET) INTO SIDE B.
0720: MIX SIDE A, SIDE B.
0900: UNCOVER BAG (T=0).
0905: WEATHER: HOT AND CLEAR.
1620: SAMPLING ENDED, DAY 1.
1625: BAG COVERED.

DAY 2 (SEPT. 10)

0900: BAG UNCOVERED.
0905: WEATHER: CLEAR AND SUNNY.
1520: SAMPLING ENDED, RUN OVER.

RESULTS	DAY 1	DAY 2
AVG. T (DEG. C)	38 (+-2)	37 (+-2)
AVG. UV (MW/CM2)	2.6 (+-1.0)	2.7 (+-0.8)

165
T=0 AT 900 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	35.2	5.6	DEG C	SIDE 1
T	DORIC-1	35.5	5.2	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.66	0.95	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.329	PPM	SIDE 1
NO	B-NOX-1	0.323	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.106	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.103	PPM	SIDE 2

AFF-127
DIESEL VS JP-4(PET)
1981 SEPTEMBER 9

INSTRUMENTS USED		SAMPLING RATE (ML/MIN)
IV	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPPELEY-2	EPPELEY 14290 UV RADIOMETER; UNDER BAG
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550H
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-127
 DIESEL VS JP-4(PET)
 1981 SEPTEMBER 9

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM 0-1790	SIDE 2 OZONE PPM 0-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE NOX-1 PPM B-NOX-1
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 835	-25	0.038	-----	0.329	-----	0.106	-----	0.000
1 845	-15	-----	0.005	-----	0.323	-----	0.103	-----
1 1005	65	0.059	-----	0.107	-----	0.277	-----	0.000
1 1015	75	-----	0.026	-----	0.111	-----	0.279	-----
1 1105	125	0.175	-----	0.016	-----	0.312	-----	0.000
1 1115	135	-----	0.200	-----	0.011	-----	0.331	-----
1 1205	185	0.386	-----	0.008	-----	0.202	-----	0.000
1 1215	195	-----	0.510	-----	0.008	-----	0.262	-----
1 1305	245	0.521	-----	0.001	-----	0.109	-----	0.000
1 1315	255	-----	0.756	-----	0.004	-----	0.181	-----
1 1405	305	0.532	-----	0.001	-----	0.071	-----	0.000
1 1415	315	-----	0.841	-----	0.001	-----	0.132	-----
1 1505	365	0.505	-----	0.002	-----	0.060	-----	0.000
1 1515	375	-----	0.831	-----	0.001	-----	0.108	-----
1 1605	425	0.461	-----	0.005	-----	0.052	-----	0.000
1 1615	435	-----	0.799	-----	0.001	-----	0.092	-----
2 835	1415	0.279	-----	0.008	-----	0.021	-----	0.000
2 845	1425	-----	0.586	-----	0.007	-----	0.038	-----
2 1005	1505	0.254	-----	0.008	-----	0.033	-----	0.000
2 1015	1515	-----	0.545	-----	0.009	-----	0.046	-----
2 1105	1565	0.249	-----	0.006	-----	0.039	-----	0.000
2 1115	1575	-----	0.519	-----	0.008	-----	0.050	-----
2 1205	1625	0.259	-----	0.009	-----	0.043	-----	0.000
2 1215	1635	-----	0.501	-----	0.008	-----	0.053	-----
2 1305	1685	0.272	-----	0.008	-----	0.043	-----	0.000
2 1315	1695	-----	0.485	-----	0.004	-----	0.052	-----
2 1405	1745	0.275	-----	0.000	-----	0.039	-----	0.000
2 1415	1755	-----	0.470	-----	0.004	-----	0.050	-----
2 1505	1805	0.268	-----	0.006	-----	0.042	-----	0.000
2 1515	1815	-----	0.450	-----	0.008	-----	0.052	-----

----- NO DATA TAKEN

500

12 NOV 1981
PAGE 3

	SIDE 1 NO2-UNC PPM	SIDE 2 NO2-UNC PPM	SIDE 1 NOX-UNC PPM	SIDE 2 NOX-UNC PPM	SIDE 1 NMHC PPMC	SIDE 2 NMHC PPMC
-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	BYRON	BYRON
00	0.000	0.000	0.000	0.000	0.16	0.16
--	0.106	-----	0.440	-----	9.10	-----
23	-----	0.103	-----	0.439	-----	21.70
--	0.277	-----	0.401	-----	9.90	-----
11	-----	0.279	-----	0.409	-----	20.10
--	0.312	-----	0.324	-----	7.70	-----
11	-----	0.331	-----	0.345	-----	20.70
--	0.202	-----	0.208	-----	8.80	-----
08	-----	0.262	-----	0.270	-----	13.20
--	0.109	-----	0.111	-----	8.50	-----
04	-----	0.181	-----	0.188	-----	-----
--	0.071	-----	0.073	-----	7.90	-----
01	-----	0.132	-----	0.137	-----	18.20
--	0.060	-----	0.062	-----	8.20	-----
01	-----	0.108	-----	0.111	-----	16.90
--	0.052	-----	0.057	-----	6.60	-----
01	-----	0.092	-----	0.096	-----	16.90
--	0.021	-----	0.026	-----	7.50	-----
07	-----	0.038	-----	0.040	-----	17.40
--	0.033	-----	0.037	-----	7.30	-----
09	-----	0.046	-----	0.050	-----	16.80
--	0.039	-----	0.041	-----	6.60	-----
08	-----	0.050	-----	0.055	-----	16.70
--	0.043	-----	0.048	-----	5.70	-----
08	-----	0.053	-----	0.058	-----	16.40
--	0.043	-----	0.047	-----	6.60	-----
04	-----	0.052	-----	0.057	-----	16.50
--	0.039	-----	0.042	-----	7.10	-----
04	-----	0.050	-----	0.052	-----	15.60
--	0.042	-----	0.047	-----	6.40	-----
08	-----	0.052	-----	0.057	-----	16.60

AFF-127

DIESEL VS JP-4(PET)
1981 SEPTEMBER 9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 2	SIDE 1	SIDE 2	UV RAD MW/CM2	SID COND 10E3 CNC-
		THC PPMC BK6800-1	THC PPMC BYRON	THC PPMC BK6800-1	T DEG C DORIC-1	T DEG C DORIC-1	EPPLEY-2	
1 605	-175	2.88	2.00	2.88	19.4	19.4	-----	0
1 835	-25	8.78	-----	-----	30.3	-----	-----	14
1 845	-15	-----	15.50	21.10	-----	33.0	-----	---
1 1005	65	7.94	-----	-----	34.4	-----	1.64	12
1 1015	75	-----	15.30	20.70	-----	35.8	2.36	---
1 1105	125	7.63	-----	-----	37.5	-----	3.55	10
1 1115	135	-----	15.00	21.00	-----	39.0	3.55	---
1 1205	185	6.78	-----	-----	38.7	-----	4.00	9
1 1215	195	-----	14.50	20.20	-----	39.5	4.00	---
1 1305	245	7.17	-----	-----	40.4	-----	3.37	8
1 1315	255	-----	14.00	20.20	-----	40.3	2.75	---
1 1405	305	6.78	-----	-----	40.3	-----	2.86	6
1 1415	315	-----	13.70	18.40	-----	38.3	2.73	---
1 1505	365	7.09	-----	-----	39.0	-----	1.96	5
1 1515	375	-----	13.50	18.40	-----	37.3	1.77	---
1 1605	425	6.47	-----	-----	35.5	-----	0.86	4
1 1615	435	-----	13.40	17.80	-----	34.2	0.77	---
2 835	1415	-----	-----	-----	27.4	-----	-----	0
2 845	1425	-----	13.10	16.10	-----	29.6	-----	---
2 1005	1505	5.24	-----	-----	32.1	-----	1.73	11
2 1015	1515	-----	12.90	17.30	-----	33.0	2.45	---
2 1105	1565	5.93	-----	-----	35.2	-----	3.64	9
2 1115	1575	-----	12.80	16.10	-----	36.4	3.64	---
2 1205	1625	5.75	-----	-----	38.6	-----	3.69	7
2 1215	1635	-----	12.90	18.20	-----	38.6	3.69	---
2 1305	1685	6.55	-----	-----	39.8	-----	3.28	5
2 1315	1695	-----	12.70	19.60	-----	39.3	2.73	---
2 1405	1745	6.47	-----	-----	38.4	-----	2.45	4
2 1415	1755	-----	12.70	15.50	-----	37.5	2.36	---
2 1505	1805	6.24	-----	-----	36.6	-----	1.73	3
2 1515	1815	-----	12.70	16.10	-----	35.4	1.55	---

----- NO DATA TAKEN

009

12 NOV 1981
PAGE 4

SIDE 2 DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET
19.4	-----	0.0	0.0	0.	0.
-----	-----	14.7	-----	502.	-----
33.0	-----	-----	0.0	-----	0.
-----	1.64	12.2	-----	487.	-----
35.8	2.36	-----	47.0	-----	1.
-----	3.55	10.0	-----	494.	-----
39.0	3.55	-----	34.0	-----	3.
-----	4.00	9.2	-----	505.	-----
39.5	4.00	-----	27.0	-----	7.
-----	3.37	8.0	-----	509.	-----
40.3	2.75	-----	20.7	-----	116.
-----	2.86	6.8	-----	512.	-----
38.3	2.73	-----	17.0	-----	271.
-----	1.96	5.1	-----	516.	-----
37.3	1.77	-----	12.8	-----	313.
-----	0.86	4.0	-----	516.	-----
34.2	0.77	-----	9.8	-----	317.
-----	-----	0.3	-----	235.	-----
29.6	-----	-----	0.2	-----	70.
-----	1.73	11.4	-----	187.	-----
33.0	2.45	-----	0.3	-----	185.
-----	3.64	9.8	-----	248.	-----
36.4	3.64	-----	0.4	-----	196.
-----	3.69	7.7	-----	399.	-----
38.6	3.69	-----	0.4	-----	179.
-----	3.28	5.7	-----	433.	-----
39.3	2.73	-----	0.4	-----	181.
-----	2.45	4.8	-----	438.	-----
37.5	2.36	-----	0.4	-----	191.
-----	1.73	3.4	-----	437.	-----
36.4	1.55	-----	0.5	-----	198.

2

AFF-127
DIESEL VS JP-4(PET)
1981 SEPTEMBER 9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		*PART>.5 PART/CC CLIMET	*PART>.5 PART/CC CLIMET	*PART>1 PART/CC CLIMET	*PART>1 PART/CC CLIMET	10-4 M-1 MRI-388	10-4 M-1 MRI-388	AER UM3 TSI-
1 605	-175	0.	0.	0.	0.	0.0	0.0	-
1 835	-25	455.	-----	282.	-----	75.0	-----	9
1 845	-15	-----	0.	-----	0.	-----	0.2	---
1 1005	65	406.	-----	185.	-----	60.0	-----	8
1 1015	75	-----	0.	-----	0.	-----	0.0	---
1 1105	125	416.	-----	201.	-----	76.0	-----	11
1 1115	135	-----	1.	-----	0.	-----	1.0	---
1 1205	185	457.	-----	290.	-----	100.0 A	-----	13
1 1215	195	-----	1.	-----	0.	-----	4.8	---
1 1305	245	472.	-----	334.	-----	100.0 A	-----	15
1 1315	255	-----	3.	-----	0.	-----	13.0	---
1 1405	305	475.	-----	334.	-----	100.0 A	-----	15
1 1415	315	-----	24.	-----	0.	-----	18.0	---
1 1505	365	474.	-----	319.	-----	100.0 A	-----	14
1 1515	375	-----	48.	-----	0.	-----	20.0	---
1 1605	425	465.	-----	297.	-----	94.0	-----	12
1 1615	435	-----	55.	-----	0.	-----	17.0	---
601	2 835	1415	164.	-----	10.	-----	4.8	2
	2 845	1425	-----	1.	-----	0.	-----	1.4
	2 1005	1505	182.	-----	12.	-----	5.9	1
	2 1015	1515	-----	16.	-----	0.	-----	2.5
	2 1105	1565	153.	-----	14.	-----	14.5	4
	2 1115	1575	-----	23.	-----	0.	-----	3.2
	2 1205	1625	208.	-----	29.	-----	26.0	4
	2 1215	1635	-----	28.	-----	0.	-----	3.2
	2 1305	1685	283.	-----	55.	-----	37.0	5
	2 1315	1695	-----	39.	-----	0.	-----	3.6
	2 1405	1745	312.	-----	79.	-----	40.0	5
	2 1415	1755	-----	56.	-----	0.	-----	3.6
	2 1505	1805	309.	-----	75.	-----	38.0	6
	2 1515	1815	-----	50.	-----	0.	-----	3.1

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
>1	BSCAT	BSCAT	AER.V	AER.V	AER.N	AER.N
CC	10-4 M-1	10-4 M-1	UM3/CC	UM3/CC	PART/CC	PART/CC
ET	MRI-388	MRI-388	TSI-023	TSI-023	TSI-023	TSI-023
	0.0	0.0	-0.	-0.	-1336.	-1336.
	75.0	-----	99.	-----	7.1E 04	-----
	-----	0.2	-----	1.	-----	589.
	60.0	-----	86.	-----	5.1E 04	-----
	-----	0.0	-----	4.	-----	8.8E 04
	76.0	-----	111.	-----	6.6E 04	-----
	-----	1.0	-----	27.	-----	7.3E 04
	100.0	A	131.	-----	8.0E 04	-----
	-----	4.8	-----	35.	-----	8.6E 04
	100.0	A	158.	-----	9.1E 04	-----
	-----	13.0	-----	38.	-----	7.0E 04
	100.0	A	153.	-----	7.0E 04	-----
	-----	18.0	-----	45.	-----	6.1E 04
	100.0	A	146.	-----	6.3E 04	-----
	-----	20.0	-----	43.	-----	5.2E 04
	94.0	-----	124.	-----	5.4E 04	-----
	-----	17.0	-----	43.	-----	4.3E 04
	4.8	-----	21.	-----	1637.	-----
	-----	1.4	-----	9.	-----	836.
	5.9	-----	14.	-----	3.3E 04	-----
	-----	2.5	-----	3.	-----	2175.
	14.5	-----	44.	-----	2.9E 04	-----
	-----	3.2	-----	8.	-----	2019.
	26.0	-----	44.	-----	1.9E 04	-----
	-----	3.2	-----	4.	-----	1949.
	37.0	-----	52.	-----	3.7E 04	-----
	-----	3.6	-----	3.	-----	3684.
	40.0	-----	58.	-----	3.6E 04	-----
	-----	3.6	-----	3.	-----	2707.
	38.0	-----	66.	-----	2.6E 04	-----
	-----	3.1	-----	9.	-----	2853.

AFF-127

DIESEL VS JP-4(PET)

1981 SEPTEMBER 9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 2	SIDE 2	SIDE 2
		AER.S UM2/CC TSI-023	AER.S UM2/CC TSI-023	N-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM VAR 3700	N-C7 PPM VAR 3700	MECYC PPM VAR 3
1 605	-175	-2.	-2.	-----	-----	-----	-----	-----
1 730	-90	-----	-----	0.0011	-----	-----	-----	-----
1 755	-65	-----	-----	-----	0.0400	-----	-----	-----
1 835	-25	1955.	-----	-----	-----	-----	-----	-----
1 845	-15	-----	23.	-----	-----	0.1025	0.1129	0.07
1 1005	65	1839.	-----	-----	-----	-----	-----	-----
1 1015	75	-----	399.	-----	-----	-----	-----	-----
1 1105	125	2310.	-----	-----	-----	-----	-----	-----
1 1115	135	-----	974.	-----	-----	0.1064	0.1109	0.07
1 1205	185	2996.	-----	-----	-----	-----	-----	-----
1 1215	195	-----	1401.	-----	-----	-----	-----	-----
1 1305	245	3006.	-----	-----	-----	-----	-----	-----
1 1315	255	-----	1480.	-----	-----	0.1057	0.1078	0.06
1 1405	305	2876.	-----	-----	-----	-----	-----	-----
1 1415	315	-----	1476.	-----	-----	-----	-----	-----
1 1505	365	2473.	-----	0.0015	-----	-----	-----	-----
1 1515	375	-----	1322.	-----	-----	-----	-----	-----
1 1605	425	2124.	-----	-----	-----	-----	-----	-----
1 1615	435	-----	1136.	-----	0.0339	0.1051	0.1024	0.06
2 725	1345	-----	-----	-----	-----	-----	-----	-----
2 835	1415	226.	-----	-----	-----	-----	-----	-----
2 045	1425	-----	119.	-----	-----	0.1027	0.1027	0.05
2 1005	1505	570.	-----	-----	-----	-----	-----	-----
2 1015	1515	-----	77.	-----	-----	-----	-----	-----
2 1105	1565	1137.	-----	-----	-----	-----	-----	-----
2 1115	1575	-----	121.	-----	-----	0.1034	0.1070	0.05
2 1205	1625	1150.	-----	-----	-----	-----	-----	-----
2 1215	1635	-----	82.	-----	-----	-----	-----	-----
2 1305	1685	1280.	-----	-----	-----	-----	-----	-----
2 1315	1695	-----	82.	-----	-----	-----	-----	-----
2 1405	1745	1195.	-----	-----	-----	-----	-----	-----
2 1415	1755	-----	87.	-----	0.0354	0.1017	0.0956	0.05
2 1505	1805	1146.	-----	-----	-----	-----	-----	-----
2 1515	1815	-----	129.	-----	-----	-----	-----	-----

----- NO DATA TAKEN

602

12 NOV 1981
PAGE 6

	SIDE 2 N-C6 PPM VAR 3700	SIDE 2 N-C7 PPM VAR 3700	SIDE 2 MECYC-C6 PPM VAR 3700	SIDE 2 N-C8 PPM VAR 3700	SIDE 1 N-C9 PPM VAR 3700	SIDE 2 N-C9 PPM VAR 3700
E 2	-----	-----	-----	-----	-----	-----
C5	-----	-----	-----	-----	0.0037	-----
M	-----	-----	-----	-----	-----	-----
-1	-----	-----	-----	-----	-----	-----
400	-----	-----	-----	-----	-----	-----
	0.1025	0.1129	0.0708	0.1065	-----	0.0538
	-----	-----	-----	-----	0.0081	-----
	-----	-----	-----	-----	-----	-----
	0.1064	0.1109	0.0761	0.1062	-----	0.0472
	-----	-----	-----	-----	0.0060	-----
	-----	-----	-----	-----	-----	-----
	0.1057	0.1078	0.0612	0.0901	-----	0.0412
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.0050	-----
	-----	-----	-----	-----	-----	-----
0339	0.1051	0.1024	0.0604	0.0891	-----	0.0405
	-----	-----	-----	-----	0.0305	-----
	-----	-----	-----	-----	-----	-----
	0.1027	0.1027	0.0555	0.0804	-----	0.0394
	-----	-----	-----	-----	0.0045	-----
	-----	-----	-----	-----	-----	-----
	0.1034	0.1070	0.0552	0.0818	-----	0.0413
	-----	-----	-----	-----	0.0048	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
.0354	0.1017	0.0956	0.0516	0.0797	-----	0.0363
	-----	-----	-----	-----	0.0050	-----
	-----	-----	-----	-----	-----	-----

2

AFF-127
 DIESEL VS JP-4(PET)
 1981 SEPTEMBER 9

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SID PP
		N-C10 PPM	VAR 3700	N-C10 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C PP
1 730	-90	0.0083	-----	0.0092	-----	0.0119	-----	0.0						
1 845	-15	-----	0.0333	-----	0.0363	-----	0.0296	-----						
1 1005	65	0.0055	-----	0.0091	-----	0.0141	-----	0.0						
1 1115	135	-----	0.0312	-----	0.0340	-----	0.0280	-----						
1 1205	185	0.0056	-----	0.0094	-----	0.0129	-----	0.0						
1 1315	255	-----	0.0284	-----	0.0310	-----	0.0254	-----						
1 1505	365	0.0050	-----	0.0077	-----	0.0116	-----	0.0						
1 1615	435	-----	0.0254	-----	0.0269	-----	0.0205	-----						
2 725	1345	0.0114	-----	0.0089	-----	0.0153	-----	0.0						
2 845	1425	-----	0.0267	-----	0.0278	-----	0.0208	-----						
2 1005	1505	0.0054	-----	0.0070	-----	0.0102	-----	0.0						
2 1115	1575	-----	0.0242	-----	0.0262	-----	0.0207	-----						
2 1205	1625	0.0078	-----	0.0077	-----	0.0096	-----	0.0						
2 1415	1755	-----	0.0236	-----	0.0250	-----	0.0188	-----						
2 1505	1805	-----	-----	0.0089	-----	0.0102	-----	0.0						

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

SIDE 2 C11 PPM R 3700	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700	SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700	SIDE 1 N-C15 PPM VAR 3700
-----	0.0119	-----	0.0174	-----	0.0240	-----	0.0400
.0363	-----	0.0296	-----	0.0199	-----	0.0247	-----
-----	0.0141	-----	0.0241	-----	0.0319	-----	0.0649
.0340	-----	0.0280	-----	0.0214	-----	0.0147	-----
-----	0.0129	-----	0.0192	-----	0.0195	-----	0.0292
.0310	-----	0.0254	-----	0.0196	-----	0.0121	-----
-----	0.0116	-----	0.0159	-----	0.0172	-----	0.0264
.0269	-----	0.0205	-----	0.0152	-----	0.0091	-----
-----	0.0153	-----	0.0209	-----	0.0202	-----	0.0303
.0278	-----	0.0208	-----	0.0150	-----	0.0094	-----
-----	0.0102	-----	0.0151	-----	0.0157	-----	0.0259
.0262	-----	0.0207	-----	0.0143	-----	0.0093	-----
-----	0.0096	-----	0.0146	-----	0.0173	-----	0.0254
.0250	-----	0.0188	-----	0.0121	-----	0.0149	-----
-----	0.0102	-----	0.0124	-----	0.0119	-----	0.0180

AFF-127

DIESEL VS JP-4(PET)
1981 SEPTEMBER 9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 2 TOLUENE VAR 3700	SIDE 2 O-XYL VAR 3700	SIDE 2 M-XYL VAR 3700	SIDE 2 124TMEBZ VAR 3700	SIDE 1 CO BYRON	SIDE 2 CO PPM BYRON	SII PP ECI
		PPM	PPM	PPM	PPM	PPM	PPM	PPM
1 605	-175	-----	-----	-----	-----	0.21	0.21	0.
1 810	-50	-----	-----	-----	-----	-----	-----	-----
1 835	-25	-----	-----	-----	-----	0.17	-----	0.
1 845	-15	0.0368	0.0133	0.0699	0.0239	-----	0.29	-----
1 1005	65	-----	-----	-----	-----	0.22	-----	0.
1 1015	75	-----	-----	-----	-----	0.26	-----	0.
1 1105	125	-----	-----	-----	-----	0.32	-----	0.
1 1115	135	0.0342	0.0121	0.0638	0.0183	-----	0.27	-----
1 1200	180	-----	-----	-----	-----	-----	-----	-----
1 1205	185	-----	-----	-----	-----	0.33	-----	0.
1 1215	195	-----	-----	-----	-----	-----	0.38	-----
1 1305	245	-----	-----	-----	-----	0.38	-----	0.
1 1315	255	0.0327	0.0113	0.0568	0.0141	-----	-----	-----
1 1405	305	-----	-----	-----	-----	0.40	-----	0.
1 1415	315	-----	-----	-----	-----	-----	0.49	-----
1 1505	365	-----	-----	-----	-----	0.45	-----	0.
1 1515	375	-----	-----	-----	-----	-----	0.55	-----
1 1605	425	-----	-----	-----	-----	0.41	-----	0.
1 1615	435	0.0326	0.0110	0.0517	0.0119	-----	0.48	-----
1 1620	440	-----	-----	-----	-----	-----	-----	-----
<i>1405</i>								
2 810	1390	-----	-----	-----	-----	-----	-----	-----
2 835	1415	-----	-----	-----	-----	0.55	-----	0.
2 845	1425	0.0325	0.0123	0.0507	0.0108	-----	0.70	-----
2 1005	1505	-----	-----	-----	-----	0.57	-----	0.
2 1015	1515	-----	-----	-----	-----	-----	0.53	-----
2 1105	1565	-----	-----	-----	-----	0.70	-----	0.
2 1115	1575	0.0313	0.0111	0.0479	0.0098	-----	0.71	-----
2 1200	1620	-----	-----	-----	-----	-----	-----	-----
2 1205	1625	-----	-----	-----	-----	0.47	-----	0.
2 1215	1635	-----	-----	-----	-----	-----	0.66	-----
2 1305	1685	-----	-----	-----	-----	0.76	-----	0.69
2 1315	1695	-----	-----	-----	-----	-----	0.85	0.
2 1405	1745	-----	-----	-----	-----	0.85	-----	0.76
2 1415	1755	0.0303	0.0112	0.0462	0.0090	-----	0.76	-----
2 1505	1805	-----	-----	-----	-----	0.86	-----	0.
2 1512	1812	-----	-----	-----	-----	-----	-----	-----
2 1515	1815	-----	-----	-----	-----	-----	0.78	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

SIDE 1 CO PPM BYRON	SIDE 2 CO PPM BYRON	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
0.21	0.21	0.000	0.000	-----	-----
0.17	-----	-----	-----	0.038	0.015
0.22	-----	0.000	-----	-----	-----
0.22	0.29	-----	0.000	-----	-----
0.32	-----	0.001	-----	-----	-----
0.32	0.26	-----	0.004	-----	-----
0.32	0.013	-----	-----	-----	-----
0.32	0.27	-----	0.023	-----	-----
0.33	-----	0.029	-----	-----	-----
0.38	0.38	-----	0.048	-----	-----
0.38	0.047	-----	-----	-----	-----
0.40	-----	0.053	-----	-----	-----
0.40	0.49	-----	0.081	-----	-----
0.45	-----	0.049	-----	-----	-----
0.45	0.55	-----	0.083	-----	-----
0.41	-----	0.048	-----	-----	-----
0.41	0.48	-----	0.077	-----	-----
0.55	-----	-----	-----	0.094	0.115
0.55	0.006	-----	-----	0.088	0.098
0.57	0.70	-----	0.003	-----	-----
0.57	0.015	-----	-----	-----	-----
0.70	0.53	-----	0.018	-----	-----
0.70	0.020	-----	-----	-----	-----
0.71	0.71	-----	0.021	-----	-----
0.47	0.019	-----	-----	0.086	0.100
0.47	0.66	-----	0.021	-----	-----
0.76	0.69	-----	0.019	-----	-----
0.85	0.020	-----	-----	-----	-----
0.85	0.76	-----	0.019	-----	-----
0.86	0.020	-----	-----	0.113	0.107
0.86	0.78	-----	0.019	-----	-----

2

AFF-127
DIESEL VS JP-4(PET)
1981 SEPTEMBER 9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023
1 605	-175	-1336.	-1336.	0.	0.	0.	0.	0.	0.	0.
1 835	-25	4.9E 04	-----	5046.	-----	5550.	-----	-----	-----	7760.
1 845	-15	-----	334.	-----	0.	-----	222.	-----	-----	-----
1 1005	65	2.6E 04	-----	3915.	-----	7548.	-----	-----	-----	1.01
1 1015	75	-----	6.2E 04	-----	1.7E 04	-----	7770.	-----	-----	-----
1 1105	125	4.1E 04	-----	1653.	-----	6926.	-----	-----	-----	1.21
1 1115	135	-----	2.6E 04	-----	2.0E 04	-----	2.3E 04	-----	-----	-----
1 1205	185	3.8E 04	-----	4872.	-----	1.3E 04	-----	-----	-----	1.81
1 1215	195	-----	3.9E 04	-----	3915.	-----	3.4E 04	-----	-----	-----
1 1305	245	7.3E 04	-----	-4263.	-----	1998.	-----	-----	-----	1.21
1 1315	255	-----	3.1E 04	-----	3219.	-----	2.1E 04	-----	-----	-----
1 1405	305	5.0E 04	-----	-1044.	-----	3641.	-----	-----	-----	9420.
1 1415	315	-----	2.9E 04	-----	1740.	-----	1.5E 04	-----	-----	-----
1 1505	365	4.3E 04	-----	4176.	-----	1554.	-----	-----	-----	7800.
1 1515	375	-----	2.6E 04	-----	1218.	-----	1.1E 04	-----	-----	-----
1 1605	425	4.0E 04	-----	0.	-----	1865.	-----	-----	-----	6700.
1 1615	435	-----	2.2E 04	-----	696.	-----	8924.	-----	-----	-----
2 835	1415	1002.	-----	87.	-----	222.	-----	-----	-----	-16.
2 845	1425	-----	-334.	-----	522.	-----	0.	-----	-----	-----
2 1005	1505	1.7E 04	-----	-1392.	-----	1.4E 04	-----	-----	-----	284.
2 1015	1515	-----	1169.	-----	435.	-----	-311.	-----	-----	-----
2 1105	1565	1837.	-----	6612.	-----	1.0E 04	-----	-----	-----	829.
2 1115	1575	-----	501.	-----	957.	-----	-89.	-----	-----	-----
2 1205	1625	3340.	-----	-957.	-----	4440.	-----	0.	-----	964.
2 1215	1635	-----	334.	-----	1044.	-----	-----	-----	-----	-----
2 1305	1685	2.1E 04	-----	1305.	-----	3108.	-----	-----	-----	927.
2 1315	1695	-----	1837.	-----	783.	-----	222.	-----	-----	-----
2 1405	1745	2.5E 04	-----	522.	-----	1643.	-----	-----	-----	619.
2 1415	1755	-----	1837.	-----	-522.	-----	577.	-----	-----	-----
2 1505	1805	1.6E 04	-----	1479.	-----	755.	-----	-----	-----	486.
2 1515	1815	-----	2171.	-----	348.	-----	-400.	-----	-----	-----

----- NO DATA TAKEN

605

12 NOV 1981
PAGE 9

SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023
0.	0.	0.	0.	0.	0.
5550.	-----	7760.	-----	3604.	-----
-----	222.	-----	0.	-----	0.
7548.	-----	1.0E 04	-----	3136.	-----
-----	7770.	-----	723.	-----	98.
6926.	-----	1.2E 04	-----	4022.	-----
-----	2.3E 04	-----	3904.	-----	394.
1.3E 04	-----	1.8E 04	-----	5031.	-----
-----	3.4E 04	-----	8266.	-----	677.
1998.	-----	1.2E 04	-----	6125.	-----
-----	2.1E 04	-----	1.3E 04	-----	1021.
3641.	-----	9423.	-----	6482.	-----
-----	1.5E 04	-----	1.3E 04	-----	1488.
1554.	-----	7808.	-----	4748.	-----
-----	1.1E 04	-----	1.1E 04	-----	1599.
1865.	-----	6700.	-----	4182.	-----
-----	8924.	-----	8965.	-----	1414.
222.	-----	-169.	-----	344.	-----
-----	0.	-----	482.	-----	98.
1.4E 04	-----	2844.	-----	492.	-----
-----	-311.	-----	747.	-----	111.
1.0E 04	-----	8290.	-----	1365.	-----
-----	-89.	-----	410.	-----	172.
4440.	-----	9640.	-----	1882.	-----
-----	0.	-----	313.	-----	234.
3108.	-----	9278.	-----	2263.	-----
-----	222.	-----	795.	-----	0.
1643.	-----	6194.	-----	2423.	-----
-----	577.	-----	603.	-----	209.
755.	-----	4868.	-----	2091.	-----
-----	-400.	-----	458.	-----	185.

2

AFF-127

DIESEL VS JP-4(PET)
1981 SEPTEMBER 9

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 605	-175	0.	0.	0.	0.
1 835	-25	700.	-----	161.	-----
1 845	-15	-----	33.	-----	0.
1 1005	65	514.	-----	133.	-----
1 1015	75	-----	0.	-----	0.
1 1105	125	794.	-----	161.	-----
1 1115	135	-----	87.	-----	46.
1 1205	185	854.	-----	168.	-----
1 1215	195	-----	120.	-----	35.
1 1305	245	1214.	-----	235.	-----
1 1315	255	-----	200.	-----	11.
1 1405	305	1214.	-----	218.	-----
1 1415	315	-----	153.	-----	42.
1 1505	365	1047.	-----	277.	-----
1 1515	375	-----	213.	-----	35.
1 1605	425	920.	-----	225.	-----
1 1615	435	-----	113.	-----	70.
2 835	1415	80.	-----	70.	-----
2 845	1425	-----	40.	-----	28.
2 1005	1505	93.	-----	0.	-----
2 1015	1515	-----	20.	-----	4.
2 1105	1565	153.	-----	70.	-----
2 1115	1575	-----	47.	-----	21.
2 1205	1625	253.	-----	35.	-----
2 1215	1635	-----	20.	-----	4.
2 1305	1685	300.	-----	56.	-----
2 1315	1695	-----	47.	-----	0.
2 1405	1745	334.	-----	91.	-----
2 1415	1755	-----	0.	-----	4.
2 1505	1805	374.	-----	140.	-----
2 1515	1815	-----	73.	-----	18.

----- NO DATA TAKEN

NOTES

A ACUALLY >100

606

AFF-128
NOX AIR IRRADIATION
1981 SEPT. 11

0726: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 17.2 C
DRY BULB: 30.4 R.H.= 25% DEW POINT: 7.8 C
0847: END FILL.
0923: INJECTED 5.0 ML. NO₂.
0925: INJECTED 18.0 ML. NO.
0927: INJECTED 0.60 ML. PROPANE AND 0.60 ML. PROPENE.
0930: MIX BAG.
1115: UNCOVER BAG (T=0).
1120: WEATHER: HOT, SUNNY, AND SOME HIGH CLOUDS.
1335: SAMPLING ENDED, RUN OVER.

RESULTS	SIDE 1	SIDE 2
CALC.AVG.OH (PPT)	0.032	0.030
CALC.RAD.INPUT (PPB/MIN)	0.075	0.065
-D(NO)/DT (PPB/MIN)	0.48	0.43

CALC. AVG. OH = 30.8 * D LN(PROPANE/PROPENE)/DT
CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂)

T=0 AT 1115 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	36.0	2.5	DEG C	SIDE 1
T	DORIC-1	36.4	2.7	DEG C	SIDE 2
UV RAD	EPPELEY-2	3.06	0.43	MW/CM ²	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.339	PPM	SIDE 1
NO	B-NOX-1	0.339	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.100	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.100	PPM	SIDE 2
PROPANE	DMS-1	0.0184	PPM	SIDE 1
PROPANE	DMS-1	0.0184	PPM	SIDE 2
PROPENE	DMS-1	0.0143	PPM	SIDE 1
PROPENE	DMS-1	0.0143	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPELEY-2	EPPELEY 14290 UV RADIOMETER; UNDER BAG
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4000	ECD-3	AF-LAB; 12% CARBOWAX-600 GC; ECD

AFF-128
NOX AIR IRRADIATION
1981 SEPT. 11

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO ₂ -UNC PPM B-NOX-1	SIDE 2 NO ₂ -UNC PPM B-NOX-1	SIDE 1 NOX-UN PPM B-NOX-1
1 1025	-50	-----	-----	-----	-----	-----	-----	-----
1 1045	-30	0.000	0.000	0.339	0.339	0.100	0.100	0.441
1 1115	0	0.000	-----	0.339	-----	0.108	-----	0.450
1 1130	15	-----	0.000	-----	0.332	-----	0.112	-----
1 1145	30	0.000	-----	0.324	-----	0.119	-----	0.450
1 1200	45	-----	0.000	-----	0.316	-----	0.118	-----
1 1215	60	0.000	-----	0.307	-----	0.130	-----	0.441
1 1230	75	-----	0.001	-----	0.309	-----	0.128	-----
1 1245	90	0.002	-----	0.281	-----	0.143	-----	0.430
1 1300	105	-----	0.001	-----	0.291	-----	0.132	-----
1 1315	120	0.002	-----	0.258	-----	0.164	-----	0.430
1 1330	135	-----	0.001	-----	0.281	-----	0.145	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 SSET-1 PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	SIDE 1 PROPANE PPM DMS-1	SIDE 2 PROPANE PPM DMS-1	SIDE 1 PROPENE PPM DMS-1	SIDE 2 PROPENE PPM DMS-1	SIDE 1 T DEG C DORIC-
1 1025	-50	-----	-----	0.0184	0.0184	0.0143	0.0143	-----
1 1045	-30	2.51	2.51	0.0185	0.0185	0.0143	0.0143	32.7
1 1115	0	-----	-----	0.0181	-----	0.0141	-----	35.0
1 1130	15	-----	-----	-----	0.0185	-----	0.0142	-----
1 1145	30	-----	-----	0.0171	-----	0.0128	-----	34.0
1 1200	45	-----	-----	-----	0.0165	-----	0.0121	-----
1 1215	60	-----	-----	0.0152	-----	0.0114	-----	37.3
1 1230	75	-----	-----	-----	0.0175	-----	0.0126	-----
1 1245	90	-----	-----	0.0172	-----	0.0122	-----	38.4
1 1300	105	-----	-----	-----	0.0162	-----	0.0113	-----
1 1315	120	4.45	-----	0.0184	-----	0.0125	-----	38.6
1 1330	135	-----	4.29	-----	0.0176	-----	0.0119	-----

----- NO DATA TAKEN

608

12 NOV 1981
PAGE 2

SIDE 2 NO PPM -NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 LNC3/C3=	SIDE 2 LNC3/C3=
-------------------------------	-------------------------------------	-------------------------------------	-------------------------------------	-------------------------------------	--------------------	--------------------

0.339	0.100	0.100	0.449	0.449	0.4610	0.4610
0.332	0.108	-----	0.450	-----	0.4670	0.4670
0.316	-----	0.112	-----	0.451	0.4530	-----
0.309	-----	0.119	-----	0.450	0.4990	0.4730
0.291	-----	0.118	-----	0.442	-----	0.5180
0.281	-----	0.130	-----	0.442	0.4940	-----
0.281	-----	0.128	-----	0.444	-----	0.5390
0.291	-----	0.143	-----	0.439	0.5480	-----
0.291	-----	0.132	-----	0.438	0.5630	-----
0.281	-----	0.164	-----	0.438	0.5940	-----
0.281	-----	0.145	-----	0.434	-----	0.6000

SIDE 2 PROPANE PPM DMS-1	SIDE 1 PROPENE PPM DMS-1	SIDE 2 PROFENE PPM DMS-1	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON
0.0184	0.0143	0.0143	-----	-----	-----	0.15	0.15
0.0185	0.0143	0.0143	32.7	32.7	-----	0.07	-----
0.0185	0.0141	-----	35.0	-----	3.64	-----	0.10
0.0185	-----	0.0142	-----	34.4	2.27	-----	-----
0.0165	-----	0.0128	-----	34.0	2.50	0.08	-----
0.0165	-----	0.0121	-----	35.3	3.14	-----	0.11
0.0162	0.0114	-----	37.3	-----	3.55	0.07	-----
0.0175	-----	0.0126	-----	38.1	3.37	-----	0.10
0.0175	0.0122	-----	38.4	-----	3.09	0.07	-----
0.0162	-----	0.0113	-----	38.6	3.09	-----	0.07
0.0176	0.0125	-----	38.6	-----	3.00	0.10	-----
0.0176	-----	0.0119	-----	39.6	2.91	-----	0.07

AFF-128
NOX AIR IRRADIATION
1981 SEPT. 11

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 THC PPMC BYRON	SIDE 2 THC PPMC BYRON	SIDE 1 CO PPM BYRON	SIDE 2 CO PPM BYRON	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
1 1010	-65	-----	-----	-----	-----	-----	-----	0.006	0.006
1 1045	-30	2.38	2.38	1.10	1.10	0.000	0.000	-----	-----
1 1115	0	2.38	-----	1.12	-----	-----	-----	-----	-----
1 1130	15	-----	2.33	-----	1.24	-----	-----	-----	-----
1 1145	30	2.44	-----	1.34	-----	-----	-----	-----	-----
1 1200	45	-----	2.46	-----	1.23	-----	-----	-----	-----
1 1215	60	2.47	-----	1.20	-----	-----	-----	-----	-----
1 1230	75	-----	2.31	-----	1.11	-----	-----	-----	-----
1 1245	90	2.44	-----	-----	-----	-----	-----	-----	-----
1 1300	105	-----	2.38	-----	1.13	-----	-----	-----	-----
1 1315	120	2.46	-----	1.30	-----	0.000	-----	-----	-----
1 1320	125	-----	-----	-----	-----	-----	-----	0.008	0.008
1 1330	135	-----	2.46	-----	1.17	-----	0.000	-----	-----

----- NO DATA TAKEN

AFF-129
 JP-4 VS. DIESEL
 1981 SEPT. 15,16

DAY 1 (SEPT. 15)
 0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 12.4 C
 DRY BULB: 18.2 C R.H.= 50% DEW POINT: 7.6 C
 0557: END FILL.
 0631: INJECTED 5.0 ML. NO2.
 0633: INJECTED 18.0 ML. NO.
 0635: MIX AND DIVIDE BAG.
 0646: INJECTED 550 MICROLITERS OF DIESEL FUEL INTO
 SIDE B AT 250 DEGREES C FOR 30 MINUTES.
 0701: INJECTED 370 MICROLITERS JP-4 INTO SIDE A.
 0720: MIX SIDE A, SIDE B.
 0900: UNCOVER BAG (T=0).
 0905: WEATHER: SUNNY AND WARM.
 1620: END SAMPLING, DAY 1.
 1630: COVERED BAG.
 DAY 2 (SEPT. 16)
 0900: UNCOVER BAG.
 0905: WEATHER: HAZY, SUNNY, HOT.
 1520: END SAMPLING, RUN OVER.

RESULTS	DAY 1	DAY 2
AVG.T(DEG.C)	36(+2)	38(+3)
AVG.UV(MW/CM2)	2.1(+0.8)	2.3(+0.6)

T=0 AT 900 PST

BAG NO. 24 USED

ID	INST.	AVERAGE	S.DEV	UNITS
		VALUE		
T	DORIC-1	34.5	6.3	DEG C SIDE 1
T	DORIC-1	34.8	5.9	DEG C SIDE 2
UV RAD	EPPELEY-2	2.17	0.73	MW/CM2

ID	INST.	INITIAL	UNITS
		CONC.	
NO	B-NOX-1	0.350	PPM SIDE 1
NO	B-NOX-1	0.349	PPM SIDE 2
NO2-UNC	B-NOX-1	0.119	PPM SIDE 1
NO2-UNC	B-NOX-1	0.114	PPM SIDE 2
NMHC	BYRON	0.15	PPMC SIDE 1
NMHC	BYRON	0.15	PPMC SIDE 2

AFF-129
JP-4 VS. DIESEL
1981 SEPT. 15,16

INSTRUMENTS USED		SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12° 5% CARBOWAX-600 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN113
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2190	PN-2	RH-103; 5' POROPAK-N GC; FID
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
3000	CA	CHROMOTRUPIC ACID HCHO ANALYSIS

611

AFF-129
JP-4 VS. DIESEL
1981 SEPT. 15,16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO2-UNC PPM	NO2-UNC PPM	NOX-UNC PPM
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 835	-25	0.004	-----	0.350	-----	0.119	-----	0.470
1 845	-15	-----	0.039	-----	0.349	-----	0.114	-----
1 1005	65	0.011	-----	0.231	-----	0.214	-----	0.456
1 1015	75	-----	0.043	-----	0.108	-----	0.322	-----
1 1105	125	0.047	-----	0.068	-----	0.317	-----	0.423
1 1115	135	-----	0.160	-----	0.014	-----	0.362	-----
1 1205	185	0.214	-----	0.010	-----	0.375	-----	0.368
1 1215	195	-----	0.325	-----	0.009	-----	0.266	-----
1 1305	245	0.455	-----	0.001	-----	0.307	-----	0.290
1 1315	255	-----	0.445	-----	0.000	-----	0.156	-----
1 1405	305	0.626	-----	0.007	-----	0.232	-----	0.233
1 1415	315	-----	0.454	-----	0.003	-----	0.102	-----
1 1505	365	0.684	-----	0.000	-----	0.170	-----	0.170
1 1515	375	-----	0.429	-----	0.002	-----	0.079	-----
1 1605	425	0.674	-----	0.003	-----	0.139	-----	0.140
1 1615	435	-----	0.392	-----	0.000	-----	0.070	-----
2 835	1415	0.441	-----	0.000	-----	0.048	-----	0.046
2 845	1425	-----	0.241	-----	0.000	-----	0.030	-----
2 1005	1505	0.413	-----	0.000	-----	0.048	-----	0.049
2 1015	1515	-----	0.224	-----	0.000	-----	0.037	-----
2 1105	1565	0.403	-----	0.000	-----	0.057	-----	0.056
2 1115	1575	-----	0.231	-----	0.000	-----	0.042	-----
2 1205	1625	0.400	-----	0.000	-----	0.059	-----	0.057
2 1215	1635	-----	0.249	-----	0.000	-----	0.042	-----
2 1305	1685	0.403	-----	0.000	-----	0.058	-----	0.058
2 1315	1695	-----	0.254	-----	0.000	-----	0.047	-----
2 1405	1745	0.404	-----	0.000	-----	0.053	-----	0.053
2 1415	1755	-----	0.254	-----	0.000	-----	0.041	-----
2 1505	1805	0.392	-----	0.000	-----	0.052	-----	0.051
2 1515	1815	-----	0.241	-----	0.000	-----	0.038	-----

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

DE 2 NO PM OX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON
.000	0.000	0.000	0.000	0.000	0.15	0.15
-----	0.119	-----	0.470	-----	21.90	-----
.349	-----	0.114	-----	0.462	-----	10.00
-----	0.214	-----	0.456	-----	21.50	-----
.108	-----	0.322	-----	0.430	-----	11.00
-----	0.317	-----	0.423	-----	20.50	-----
.014	-----	0.362	-----	0.357	-----	10.70
-----	0.375	-----	0.368	-----	20.60	-----
.009	-----	0.266	-----	0.258	-----	9.00
-----	0.307	-----	0.290	-----	20.00	-----
.000	-----	0.156	-----	0.156	-----	8.20
-----	0.232	-----	0.233	-----	19.40	-----
.003	-----	0.102	-----	0.104	-----	8.00
-----	0.170	-----	0.170	-----	18.40	-----
.002	-----	0.079	-----	0.080	-----	8.30
-----	0.139	-----	0.140	-----	17.00	-----
.000	-----	0.070	-----	0.069	-----	9.20
-----	0.048	-----	0.046	-----	19.70	-----
.000	-----	0.030	-----	0.028	-----	7.80
-----	0.048	-----	0.049	-----	18.00	-----
.000	-----	0.037	-----	0.037	-----	8.10
-----	0.057	-----	0.056	-----	18.50	-----
.000	-----	0.042	-----	0.041	-----	8.10
-----	0.059	-----	0.057	-----	17.30	-----
.000	-----	0.042	-----	0.041	-----	7.50
-----	0.058	-----	0.058	-----	15.90	-----
.000	-----	0.047	-----	0.046	-----	6.90
-----	0.053	-----	0.053	-----	16.20	-----
.000	-----	0.041	-----	0.040	-----	7.60
-----	0.052	-----	0.051	-----	16.70	-----
.000	-----	0.038	-----	0.040	-----	7.30

2

AFF-129
 JP-4 VS. DIESEL
 1981 SEPT. 15,16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	UV RAD	SIDE 1	SIDE
		THC	THC	T	T	MW/CM2	CONDENS	CONDENS
		PPMC	PPMC	DEG C	DEG C	10E3/CC	CNC-143	10E3/C CNC-14
1 605	-175	4.97	4.97	18.0	18.0	-----	0.0	0.0
1 835	-25	27.50	-----	26.4	-----	-----	0.0	-----
1 845	-15	-----	10.20	-----	28.3	-----	-----	17.6
1 1005	65	25.20	-----	31.5	-----	1.77	49.0	-----
1 1015	75	-----	9.16	-----	32.7	2.27	-----	15.1
1 1105	125	26.30	-----	34.7	-----	3.00	32.0	-----
1 1115	135	-----	10.60	-----	36.2	2.91	-----	13.7
1 1205	185	22.90	-----	36.8	-----	3.09	24.7	-----
1 1215	195	-----	9.16	-----	37.1	3.09	-----	12.0
1 1305	245	21.80	-----	38.4	-----	2.45	19.0	-----
1 1315	255	-----	9.05	-----	38.8	2.32	-----	9.6
1 1405	305	22.90	-----	38.0	-----	1.96	14.9	-----
1 1415	315	-----	8.36	-----	37.4	1.87	-----	8.0
1 1505	365	22.90	-----	37.1	-----	1.37	11.9	-----
1 1515	375	-----	9.85	-----	35.8	1.32	-----	6.9
1 1605	425	21.80	-----	34.6	-----	0.77	9.1	-----
1 1615	435	-----	11.30	-----	32.9	0.68	-----	6.2
2 835	1415	18.30	-----	26.7	-----	-----	0.2	-----
2 845	1425	-----	-----	28.4	-----	-----	0.4	-----
2 1005	1505	18.30	-----	32.1	-----	1.82	0.2	-----
2 1015	1515	-----	7.44	-----	33.8	2.14	-----	1.5
2 1105	1565	21.80	-----	36.5	-----	3.09	0.4	-----
2 1115	1575	-----	8.59	-----	37.6	3.05	-----	2.4
2 1205	1625	20.60	-----	39.1	-----	2.91	0.4	-----
2 1215	1635	-----	9.16	-----	39.8	2.84	-----	2.0
2 1305	1685	19.50	-----	41.6	-----	2.50	0.4	-----
2 1315	1695	-----	9.16	-----	41.4	2.41	-----	1.7
2 1405	1745	20.60	-----	40.9	-----	2.09	0.2	-----
2 1415	1755	-----	8.47	-----	39.7	2.00	-----	1.4
2 1505	1805	21.80	-----	39.8	-----	1.41	0.2	-----
2 1515	1815	-----	9.27	-----	38.5	1.28	-----	1.2

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

UV RAD MW/CM2 EPFLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
-----	0.0	0.0	0.	0.	0.	0.
-----	0.0	-----	0.	-----	0.	-----
-----	-----	17.6	-----	523.	-----	486.
1.77	49.0	-----	0.	-----	0.	-----
2.27	-----	15.1	-----	515.	-----	454.
3.00	32.0	-----	0.	-----	0.	-----
2.91	-----	13.7	-----	512.	-----	443.
3.09	24.7	-----	0.	-----	0.	-----
3.09	-----	12.0	-----	522.	-----	470.
2.45	19.0	-----	1.	-----	0.	-----
2.32	-----	9.6	-----	524.	-----	484.
1.96	14.9	-----	102.	-----	1.	-----
1.87	-----	8.0	-----	528.	-----	490.
1.37	11.9	-----	248.	-----	16.	-----
1.32	-----	6.9	-----	528.	-----	488.
0.77	9.1	-----	303.	-----	40.	-----
0.68	-----	6.2	-----	527.	-----	482.
-----	0.2	-----	123.	-----	5.	-----
-----	-----	0.4	-----	429.	-----	249.
1.82	0.2	-----	181.	-----	16.	-----
2.14	-----	1.5	-----	466.	-----	286.
3.09	0.4	-----	246.	-----	33.	-----
3.05	-----	2.4	-----	440.	-----	336.
2.91	0.4	-----	282.	-----	49.	-----
2.84	-----	2.0	-----	456.	-----	341.
2.50	0.4	-----	269.	-----	51.	-----
2.41	-----	1.7	-----	464.	-----	347.
2.09	0.2	-----	243.	-----	53.	-----
2.00	-----	1.4	-----	468.	-----	350.
1.41	0.2	-----	213.	-----	56.	-----
1.28	-----	1.2	-----	462.	-----	344.

J

AFF-129

JP-4 VS. DIESEL
1981 SEPT. 15,16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
		*PART>1 PART/CC CLIMET	*PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023
1 605	-175	0.	0.	0.0	0.0	1.	1.	-1122.
1 835	-25	0.	-----	0.2	-----	2.	-----	1224
1 845	-15	-----	348.	-----	97.0	-----	69.	-----
1 1005	65	0.	-----	0.2	-----	5.	-----	4.8E
1 1015	75	-----	265.	-----	75.0	-----	64.	-----
1 1105	125	0.	-----	0.3	-----	10.	-----	7.5E
1 1115	135	-----	237.	-----	83.0	-----	76.	-----
1 1205	185	0.	-----	1.1	-----	30.	-----	5.6E
1 1215	195	-----	293.	-----	100.0 A	-----	118.	-----
1 1305	245	0.	-----	4.6	-----	39.	-----	5.4E
1 1315	255	-----	335.	-----	100.0 A	-----	148.	-----
1 1405	305	0.	-----	9.7	-----	44.	-----	7.5E
1 1415	315	-----	343.	-----	100.0 A	-----	53.	-----
1 1505	365	0.	-----	15.0	-----	58.	-----	5.0E
1 1515	375	-----	336.	-----	100.0 A	-----	103.	-----
1 1605	425	0.	-----	16.4	-----	62.	-----	4.7E
1 1615	435	-----	319.	-----	100.0 A	-----	99.	-----
2 835	1415	0.	-----	2.5	-----	3.	-----	1539.
2 845	1425	-----	38.	-----	14.0	-----	12.	-----
2 1005	1505	0.	-----	3.1	-----	2.	-----	2366.
2 1015	1515	-----	58.	-----	13.2	-----	25.	-----
2 1105	1565	0.	-----	3.5	-----	4.	-----	2158.
2 1115	1575	-----	76.	-----	16.0	-----	22.	-----
2 1205	1625	0.	-----	4.0	-----	15.	-----	4507.
2 1215	1635	-----	94.	-----	23.0	-----	26.	-----
2 1305	1685	1.	-----	4.1	-----	6.	-----	1892.
2 1315	1695	-----	105.	-----	26.0	-----	22.	-----
2 1405	1745	1.	-----	3.8	-----	6.	-----	2731.
2 1415	1755	-----	110.	-----	26.0	-----	22.	-----
2 1505	1805	1.	-----	3.6	-----	7.	-----	3384.
2 1515	1815	-----	105.	-----	25.0	-----	27.	-----

----- NO DATA TAKEN

G14

12 NOV 1981
PAGE 5

E 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
AT	AER.J	AER.V	AER.N	AER.N	AER.S	AER.S
M-1	UM3/CC	UM3/CC	PART/CC	PART/CC	UM2/CC	UM2/CC
388	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
.0	1.	1.	-1122.	-1122.	6.	6.
--	2.	----	1224.	-----	28.	-----
.0	----	69.	-----	8.8E 04	-----	2148.
--	5.	----	4.8E 04	-----	338.	-----
.0	----	64.	-----	6.4E 04	-----	1895.
--	10.	----	7.5E 04	-----	561.	-----
.0	----	76.	-----	7.8E 04	-----	2167.
--	30.	----	5.6E 04	-----	996.	-----
.0 A	----	118.	-----	7.4E 04	-----	2810.
--	39.	----	5.4E 04	-----	1273.	-----
.0 A	----	148.	-----	8.2E 04	-----	2985.
--	44.	----	7.5E 04	-----	1474.	-----
.0 A	----	53.	-----	8.1E 04	-----	2055.
--	58.	----	5.0E 04	-----	1515.	-----
.0 A	----	103.	-----	7.5E 04	-----	2393.
--	62.	----	4.7E 04	-----	1435.	-----
.0 A	----	99.	-----	6.5E 04	-----	2184.
--	3.	----	1539.	-----	88.	-----
.0	----	12.	-----	5957.	-----	272.
--	2.	----	2366.	-----	67.	-----
.2	----	25.	-----	8384.	-----	354.
--	4.	----	2153.	-----	98.	-----
.0	----	22.	-----	1.4E 04	-----	437.
--	15.	----	4507.	-----	140.	-----
.0	----	26.	-----	1.4E 04	-----	541.
--	6.	----	1892.	-----	112.	-----
.0	----	22.	-----	1.7E 04	-----	522.
--	6.	----	2731.	-----	120.	-----
.0	----	22.	-----	1.6E 04	-----	501.
--	7.	----	3384.	-----	130.	-----
0	----	27.	-----	1.1E 04	-----	523.

2

AFF-129
JP-4 VS. DIESEL
1981 SEPT. 15, 16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 1	SIDE 1	SIDE 1	SIDE 1
		N-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM VAR 3700	N-C7 PPM VAR 3700	MECYC-C6 PPM VAR 3700	N-C8 PPM VAR 3700	N-C9 PPM VAR 3700
1 605	-175	-----	-----	-----	-----	-----	-----	-----
1 730	-90	-----	-----	0.1102	0.1174	0.0723	0.1140	0.0498
1 735	-85	-----	-----	-----	-----	-----	-----	-----
1 845	-15	-----	-----	-----	-----	-----	-----	-----
1 1005	65	-----	-----	0.1087	0.1187	0.0746	0.1093	0.0509
1 1115	135	-----	-----	-----	-----	-----	-----	-----
1 1205	185	-----	-----	0.1083	0.1119	0.0670	0.1067	0.0451
1 1315	255	-----	-----	-----	-----	-----	-----	-----
1 1505	365	-----	-----	0.1102	0.1088	0.0618	0.0879	0.0437
1 1515	375	-----	0.0014	-----	-----	-----	-----	-----
1 1605	425	0.0381	-----	-----	-----	-----	-----	-----
1 1615	435	-----	-----	-----	-----	-----	-----	-----
2 720	1340	-----	0.0014	-----	-----	-----	-----	-----
2 745	1365	0.0373	-----	-----	-----	-----	-----	-----
2 835	1415	-----	-----	0.1095	0.1095	0.0640	0.0867	0.0426
2 1005	1505	-----	-----	0.0988	0.1012	0.0563	0.0890	0.0389
2 1115	1575	-----	-----	-----	-----	-----	-----	-----
2 1205	1625	-----	-----	0.0977	0.0988	0.0538	0.0792	0.0363
2 1405	1745	-----	-----	0.1020	0.0986	0.0543	0.0810	0.0369
2 1505	1805	0.0354	-----	-----	-----	-----	-----	-----
2 1515	1815	-----	0.0020	-----	-----	-----	-----	-----

----- NO DATA TAKEN

615

12 NOV 1981
PAGE 6

	SIDE 1 MECYC-C6 PPM VAR 3700	SIDE 1 N-C8 PPM VAR 3700	SIDE 1 N-C9 PPM VAR 3700	SIDE 2 N-C9 PPM VAR 3700	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700
1	-----	-----	-----	-----	-----	-----
7	0.0723	0.1140	0.0498	-----	0.0394	-----
700	-----	-----	-----	0.0057	-----	0.0054
74	-----	-----	-----	0.0054	0.0338	-----
87	0.0746	0.1093	0.0509	-----	0.0052	-----
19	0.0670	0.1067	0.0451	-----	0.0320	0.0053
88	0.0618	0.0879	0.0437	-----	0.0286	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0061	-----	0.0053
-----	-----	-----	-----	-----	-----	0.0053
95	0.0640	0.0867	0.0426	-----	0.0277	-----
012	0.0563	0.0890	0.0389	-----	0.0281	-----
-----	-----	-----	-----	0.0056	-----	0.0057
88	0.0538	0.0792	0.0363	-----	0.0256	-----
986	0.0543	0.0810	0.0369	-----	0.0247	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	0.0053	-----	-----	0.0048

2

AFF-129

JF-4 VS. DIESEL
1981 SEPT. 15:16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE
		N-C11 PPM	VAR 3700	N-C11 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C12 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C13 PPM	VAR 3700	N-C PPM
1 730	-90	0.0385	-----	0.0293	-----	0.0244	-----	0.0	-----	0.0	-----	0.0	-----	
1 845	-15	-----	0.0098	-----	0.0144	-----	0.0255	-----	0.0	-----	0.0	-----	0.0	
1 1005	65	0.0375	-----	0.0310	-----	0.0241	-----	0.0	-----	0.0	-----	0.0	-----	
1 1115	135	-----	0.0091	-----	0.0134	-----	0.0221	-----	0.0	-----	0.0	-----	0.0	
1 1205	185	0.0353	-----	0.0294	-----	0.0213	-----	0.0	-----	0.0	-----	0.0	-----	
1 1315	255	-----	0.0091	-----	0.0138	-----	0.0212	-----	0.0	-----	0.0	-----	0.0	
1 1505	36	0.0307	-----	0.0270	-----	0.0180	-----	0.0	-----	0.0	-----	0.0	-----	
1 1615	43	-----	0.0090	-----	0.0128	-----	0.0187	-----	0.0	-----	0.0	-----	0.0	
2 720	1340	-----	0.0084	-----	0.0157	-----	0.0241	-----	0.0	-----	0.0	-----	0.0	
2 835	1415	0.0297	-----	0.0220	-----	0.0154	-----	0.0151	-----	0.0	-----	0.0	-----	
2 1005	1505	0.0299	-----	0.0224	-----	0.0151	-----	0.0	-----	0.0	-----	0.0	-----	
2 1115	1575	-----	0.0093	-----	0.0112	-----	0.0172	-----	0.0	-----	0.0	-----	0.0	
2 1205	1625	0.0270	-----	0.0200	-----	0.0136	-----	0.0	-----	0.0	-----	0.0	-----	
2 1405	1745	0.0254	-----	0.0205	-----	0.0126	-----	0.0	-----	0.0	-----	0.0	-----	
2 1515	1815	-----	0.0078	-----	0.0104	-----	0.0142	-----	0.0	-----	0.0	-----	0.0	

----- NO DATA TAKEN

616

12 NOV 1981
PAGE 7

SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700	SIDE 2 N-C15 PPM VAR 3700	SIDE 1 TOLUENE PPM VAR 3700	SIDE 1 O-XYL PPM VAR 3700
0.0244	-----	0.0194	-----	-----	0.0388	0.0157
-----	0.0255	-----	0.0324	0.0666	-----	-----
0.0241	-----	0.0173	-----	-----	0.0383	0.0142
-----	0.0221	-----	0.0265	0.0460	-----	-----
0.0213	-----	0.0183	-----	-----	0.0356	0.0129
-----	0.0212	-----	0.0241	0.0403	-----	-----
0.0180	-----	0.0122	-----	-----	0.0345	0.0132
-----	0.0187	-----	0.0190	0.0308	-----	-----
-----	0.0241	-----	0.0267	0.0477	-----	-----
0.0154	-----	0.0106	-----	-----	0.0367	0.0127
0.0151	-----	0.0097	-----	-----	0.0323	0.0123
-----	0.0172	-----	0.0195	-----	-----	-----
0.0136	-----	0.0097	-----	-----	0.0298	0.0101
0.0126	-----	0.0083	-----	-----	0.0321	0.0107
-----	0.0142	-----	0.0141	0.0204	-----	-----

2

AFF-129
 JP-4 VS. DIESEL
 1981 SEPT. 15,16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 M-XYL VAR 3700	SIDE 1 124TMEBZ VAR 3700	SIDE 1 PAN ECD-3	SIDE 2 PAN ECD-3	SIDE 1 HCHO CA	SIDE 2 HCHO PPM CA	SIDE PART. PART/ TSI-C
		PPM	PPM	PPM	PPM	PPM	PPM	PPM
1 605	-175	-----	-----	0.000	0.000	-----	-----	-1670
1 730	-90	0.0742	0.0241	-----	-----	-----	-----	---
1 810	-50	-----	-----	-----	-----	0.006	0.004	---
1 835	-25	-----	-----	0.000	-----	-----	-----	1169
1 845	-15	-----	-----	-----	0.000	-----	-----	---
1 1005	65	0.0708	0.0225	0.002	-----	-----	-----	6.4E
1 1015	75	-----	-----	-----	0.004	-----	-----	---
1 1105	125	-----	-----	0.007	-----	-----	-----	4.1E
1 1115	135	-----	-----	-----	0.014	-----	-----	---
1 1200	180	-----	-----	-----	-----	0.015	0.023	---
1 1205	185	0.0652	0.0192	0.022	-----	-----	-----	1.6E
1 1215	195	-----	-----	-----	0.031	-----	-----	---
1 1305	245	-----	-----	0.042	-----	-----	-----	2.5E
1 1315	255	-----	-----	-----	0.046	-----	-----	---
1 1405	305	-----	-----	0.061	-----	-----	-----	2.6E
1 1415	315	-----	-----	-----	0.052	-----	-----	---
1 1505	365	0.0565	0.0135	0.074	-----	-----	-----	2.4E
1 1515	375	-----	-----	-----	0.060	-----	-----	---
1 1605	425	-----	-----	0.080	-----	-----	-----	2.4E
1 1610	430	-----	-----	-----	-----	0.050	0.063	---
1 1615	435	-----	-----	-----	0.058	-----	-----	---
617	2 810	1390	-----	-----	-----	0.088	0.084	---
	2 835	1415	0.0555	0.0129	0.016	-----	-----	-835
	2 845	1425	-----	-----	-----	0.013	-----	---
	2 1005	1505	0.0519	0.0121	0.026	-----	-----	1336
	2 1015	1515	-----	-----	-----	0.022	-----	---
	2 1105	1565	-----	-----	0.028	-----	-----	1336
	2 1115	1575	-----	-----	-----	0.025	-----	---
	2 1200	1620	-----	-----	-----	-----	0.071	0.077
	2 1205	1625	0.0488	0.0105	0.029	-----	-----	4342
	2 1215	1635	-----	-----	-----	0.021	-----	---
	2 1305	1685	-----	-----	0.024	-----	-----	1336
	2 1315	1695	-----	-----	-----	0.018	-----	---
	2 1405	1745	0.0483	0.0098	0.021	-----	-----	1670
	2 1415	1755	-----	-----	-----	0.018	-----	---
	2 1505	1805	-----	-----	0.019	-----	-----	2171
	2 1510	1810	-----	-----	-----	-----	0.100	0.092
	2 1515	1815	-----	-----	-----	0.016	-----	---

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	HCHO	HCHO	PART.024	PART.024	PART.042	PART.042
	PPM	PPM	PART/CC	PART/CC	PART/CC	PART/CC
	CA	CA	TSI-023	TSI-023	TSI-023	TSI-023
2			-1670.	-1670.	609.	609.
3			-----	-----	-----	-----
4	0.006	0.004	-----	-----	0.	-----
5			1169.	-----	-----	-----
6			-----	5.1E 04	-----	5307.
7			6.4E 04	-----	=43848	-----
8			-----	2.7E 04	-----	4959.
9			4.1E 04	-----	2.0E 04	-----
10			-----	4.7E 04	-----	261.
11	0.015	0.023	-----	-----	-----	-----
12			1.6E 04	-----	1.2E 04	-----
13			-----	4.2E 04	-----	2349.
14			2.5E 04	-----	87,	-----
15			-----	5.5E 04	-----	3741.
16			2.6E 04	-----	1.1E 04	-----
17			-----	1.7E 04	-----	2.0E 04
18			2.4E 04	-----	~435.	-----
19			-----	5.5E 04	-----	~783.
20			2.4E 04	-----	522.	-----
21	0.050	0.063	-----	-----	-----	-----
22			-----	4.7E 04	-----	-1479.
23			-----	-----	-----	-----
24	0.088	0.084	-----	-----	-----	-----
25			-835.	-----	870.	-----
26			-----	3340.	-----	522.
27			1336.	-----	174.	-----
28			-----	5344.	-----	783.
29			1336.	-----	0.	-----
30			-----	9018.	-----	261.
31	0.071	0.077	-----	-----	-----	-----
32			4342.	-----	~174.	-----
33			-----	9686.	-----	-261.
34			1336.	-----	-522.	-----
35			-----	1.3E 04	-----	174.
36			1670.	-----	87.	-----
37			-----	1.0E 04	-----	1218.
38			2171.	-----	87.	-----
39	0.100	0.092	-----	-----	-----	-----
40			-----	8517.	-----	-348.

AFF-129

JP-4 VS. DIESEL
1981 SEPT. 15,16

CLOCK TIME BY HR. (MIN)	ELAPSED TIME	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE PART.4
		PART.075 PART/CC	TSI-023	PART.075 PART/CC	TSI-023	PART.133 PART/CC	TSI-023	PART.133 PART/CC	TSI-023	PART.237 PART/CC	TSI-023	PART.237 PART/CC	TSI-023	TSI-02
1 605	-175	-89.	-89.	24.	24.	0.	0.	0.	0.	0.	0.	0.		
1 835	-25	0.	-----	0.	-----	25.	-----	-----	-----	27.	-----	27.		
1 845	-15	-----	1.1E 04	-----	1.5E 04	-----	4280.	-----	-----	-----	-----	-----		
1 1005	65	2.7E 04	-----	-72.	-----	-148.	-----	-----	-----	27.	-----	27.		
1 1015	75	-----	1.5E 04	-----	1.4E 04	-----	3050.	-----	-----	-----	-----	-----		
1 1105	125	1.2E 04	-----	1976.	-----	135.	-----	-----	-----	47.	-----	47.		
1 1115	135	-----	1.1E 04	-----	1.6E 04	-----	3850.	-----	-----	-----	-----	-----		
1 1205	185	2.2E 04	-----	5422.	-----	369.	-----	-----	-----	100.	-----	100.		
1 1215	195	-----	6083.	-----	1.7E 04	-----	5966.	-----	-----	-----	-----	-----		
1 1305	245	1.8E 04	-----	9110.	-----	1193.	-----	-----	-----	253.	-----	253.		
1 1315	255	-----	666.	-----	1.5E 04	-----	6273.	-----	-----	-----	-----	-----		
1 1405	305	2.7E 04	-----	9833.	-----	910.	-----	-----	-----	100.	-----	100.		
1 1415	315	-----	2.7E 04	-----	1.5E 04	-----	3247.	-----	-----	-----	-----	-----		
1 1505	365	1.2E 04	-----	1.2E 04	-----	1796.	-----	-----	-----	253.	-----	253.		
1 1515	375	-----	3197.	-----	1.1E 04	-----	6273.	-----	-----	-----	-----	-----		
1 1605	425	9013.	-----	1.2E 04	-----	1365.	-----	-----	-----	213.	-----	213.		
1 1615	435	-----	1998.	-----	1.2E 04	-----	4502.	-----	-----	-----	-----	-----		
2 835	1415	400.	-----	1060.	-----	37.	-----	-----	-----	0.	-----	0.		
2 845	1425	-----	533.	-----	651.	-----	775.	-----	-----	-----	-----	-----		
2 1005	1505	89.	-----	530.	-----	263.	-----	-----	-----	-53.	-----	-----		
2 1015	1515	-----	622.	-----	843.	-----	652.	-----	-----	-----	-----	-----		
2 1105	1565	0.	-----	554.	-----	221.	-----	-----	-----	47.	-----	47.		
2 1115	1575	-----	1154.	-----	2362.	-----	849.	-----	-----	-----	-----	-----		
2 1205	1625	-355.	-----	603.	-----	111.	-----	-----	-----	-100.	-----	-100.		
2 1215	1635	-----	488.	-----	2579.	-----	1119.	-----	-----	-----	-----	-----		
2 1305	1685	311.	-----	554.	-----	123.	-----	-----	-----	87.	-----	87.		
2 1315	1695	-----	464.	-----	3133.	-----	1095.	-----	-----	-----	-----	-----		
2 1405	1745	355.	-----	289.	-----	246.	-----	-----	-----	80.	-----	80.		
2 1415	1755	-----	222.	-----	2796.	-----	1119.	-----	-----	-----	-----	-----		
2 1505	1805	89.	-----	771.	-----	209.	-----	-----	-----	47.	-----	47.		
2 1515	1815	-----	-444.	-----	1783.	-----	1168.	-----	-----	-----	-----	-----		

----- NO DATA TAKEN

NOTES

A ACTUALLY >100

12 NOV 1981
PAGE 9

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	0.	0.	0.	0.	4.	4.
	25.	-----	27.	-----	4.	-----
04	-----	4280.	-----	387.	-----	11.
	-148.	-----	27.	-----	0.	-----
04	-----	3050.	-----	287.	-----	46.
	135.	-----	47.	-----	4.	-----
04	-----	3850.	-----	400.	-----	49.
	369.	-----	100.	-----	53.	-----
04	-----	5966.	-----	754.	-----	109.
	1193.	-----	253.	-----	25.	-----
04	-----	6273.	-----	940.	-----	218.
	910.	-----	100.	-----	70.	-----
04	-----	3247.	-----	40.	-----	18.
	1796.	-----	253.	-----	81.	-----
04	-----	6273.	-----	760.	-----	70.
	1365.	-----	213.	-----	123.	-----
04	-----	4502.	-----	800.	-----	95.
	37.	-----	0.	-----	7.	-----
	-----	775.	-----	133.	-----	4.
	283.	-----	-53.	-----	7.	-----
3.	-----	652.	-----	67.	-----	74.
	221.	-----	47.	-----	0.	-----
2.	-----	849.	-----	67.	-----	46.
	111.	-----	-100.	-----	81.	-----
9.	-----	1119.	-----	227.	-----	28.
	123.	-----	87.	-----	4.	-----
3.	-----	1095.	-----	180.	-----	14.
	246.	-----	80.	-----	4.	-----
6.	-----	1119.	-----	160.	-----	18.
	209.	-----	47.	-----	11.	-----
3.	-----	1168.	-----	313.	-----	21.

2

AFF-130
PROPENE/NOX CONDITIONING
1981 SEPT. 17

0600: START FILL. WET: 6.0 DRY: 0.0 WE1 BULB: 16.3
DRY BULB: 28.3 R.H.= 27% DEW POINT: 7.3 C
0716: END FILL.
0725: INJECTED 11.0 ML. NO₂.
0727: INJECTED 12.0 ML. NO.
0729: INJECTED 22.5 ML. PROPENE.
0731: MIX BAG.
0900: UNCOVER BAG (T=0).
0905: WEATHER: SUNNY AND HOT.
1400: RUN OVER, BAG DUMPED.

T=0 AT 900 PST

BAG NO. 24 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	R-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO ₂ -UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPENE PPM DMS-1
1 740	~80	-----	-----	-----	-----	0.4947
1 850	~10	0.001	0.220	0.227	0.462	-----
1 1400	300	0.740	0.000	0.201	0.196	-----

----- NO DATA TAKEN

AFF-131

DIESEL VS. N-BUTANE

1981 SEPT. 18

0445: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 13.6 C
DRY BULB: 22.0 C R.H.= 38% DEW POINT: 6.6 C
0556: END FILL.
0632: INJECTED 5.0 ML. NO₂.
0634: INJECTED 18.0 ML. NO.
0637: MIX AND DIVIDE BAG.
0647: INJECTED 550 MICROLITERS DIESEL FUEL INTO
SIDE A AT 250 DEGREES C FOR 30 MINUTES.
0721: INJECTED 125 ML. OF N-BUTANE INTO SIDE B.
0725: MIX SIDE A, SIDE B.
0900: UNCOVERED BAG (T=0).
0905: WEATHER: SOME HIGH CLOUDS, BUT SUNNY.
1620: END SAMPLING, RUN OVER.

T=0 AT 900 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	33.4	5.6	DEG C SIDE 1
T	DORIC-1	33.6	5.6	DEG C SIDE 2
UV RAD	EPFLEY-2	1.97	0.81	MW/CM ²

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.341	PPM SIDE 1
NO	B-NOX-1	0.348	PPM SIDE 2
NO ₂ -UNC	B-NOX-1	0.111	PPM SIDE 1
NO ₂ -UNC	B-NOX-1	0.113	PPM SIDE 2
NMHC	BYRON	0.26	PPMC SIDE 1
NMHC	BYRON	0.26	PPMC SIDE 2
N-C4	DMS-1	0.0008	PPM SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4131	EPFLEY-2	EPFLEY 1429C UV RADIOMETER; UNDER BAG
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MR1-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2190	PN-2	RM-103; 5' POROPAK-N GC; FID
1400	VA1400-7	RM-121; C20-M/DC-703 GC; FID
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
3600	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF-131
 DIESEL VS. N-BUTANE
 1981 SEPT. 18

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
		OZONE PPM D-1790	OZONE PPM D-1790	NO PPM B-NOX-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM
1 605	-175	0.000	0.000	0.000	0.000	0.000	0.000	0.270
1 835	-25	0.042	----	0.341	----	0.111	----	0.467
1 845	-15	----	0.009	----	0.348	----	0.113	----
1 1005	65	0.046	----	0.152	----	0.270	----	0.439
1 1015	75	----	0.014	----	0.258	----	0.192	----
1 1105	125	0.117	----	0.027	----	0.362	----	0.380
1 1115	135	----	0.011	----	0.173	----	0.278	----
1 1205	185	0.295	----	0.010	----	0.270	----	0.270
1 1215	195	----	0.021	----	0.097	----	0.355	----
1 1305	245	0.455	----	0.000	----	0.151	----	0.151
1 1315	255	----	0.059	----	0.042	----	0.408	----
1 1405	305	0.470	----	0.001	----	0.088	----	0.090
1 1415	315	----	0.089	----	0.021	----	0.427	----
1 1505	365	0.431	----	0.004	----	0.066	----	0.066
1 1515	375	----	0.116	----	0.010	----	0.420	----
1 1605	425	0.395	----	0.004	----	0.053	----	0.053
1 1615	435	----	0.130	----	0.010	----	0.421	----

621

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 2	SIDE 1	SIDE 2	UV RA
		THC PPMC BK6800-1	THC PPMC BK6800-1	N-C4 PPM VA1400-7	N-C4 PPM DMS-1	T DEG C DORIC-1	T DEG C DORIC-1
1 605	-175	3.66	3.66	----	0.0008	21.8	21.8
1 755	-65	----	----	5.060	5.657	----	----
1 835	-25	9.16	----	----	----	27.7	----
1 845	-15	----	30.90	----	----	----	28.5
1 1005	65	7.79	----	----	----	32.1	1.73
1 1015	75	----	27.50	5.018	----	----	33.3
1 1105	125	9.16	----	----	----	36.3	2.14
1 1115	135	----	27.50	4.987	----	----	2.91
1 1205	185	9.05	----	27.50	4.935	----	2.68
1 1215	195	----	27.50	4.935	----	38.1	2.73
1 1305	245	8.82	----	27.50	4.894	----	38.5
1 1315	255	----	27.50	4.894	----	39.5	2.84
1 1405	305	8.82	----	27.50	4.852	----	39.7
1 1415	315	----	27.50	4.852	----	34.4	2.68
1 1505	365	9.73	----	27.50	4.852	----	33.5
1 1515	375	----	27.50	4.852	----	33.0	0.98
1 1605	425	9.27	----	27.50	5.452	----	0.80
1 1615	435	----	27.50	4.852	----	33.0	0.71

----- NO DATA TAKEN

12 NOV 1981

PAGE 2

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM	SIDE 2 NOX-UNC PPM	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON
000	0.000	0.000	0.270	0.270	0.26	0.26
0.111	-----	-----	0.467	-----	10.00	-----
348	-----	0.113	-----	0.480	-----	20.70
258	-----	0.270	-----	0.439	-----	10.30
258	-----	0.362	-----	0.192	-----	21.20
173	-----	-----	0.278	-----	0.380	-----
173	-----	-----	0.270	-----	0.468	-----
097	-----	-----	0.270	-----	8.30	-----
097	-----	-----	0.151	-----	8.40	-----
042	-----	-----	0.408	-----	0.443	-----
042	-----	-----	0.088	-----	7.80	-----
021	-----	-----	0.427	-----	0.439	-----
021	-----	-----	0.066	-----	6.90	-----
010	-----	-----	0.420	-----	0.421	-----
010	-----	-----	0.053	-----	7.80	-----
010	-----	-----	0.421	-----	0.421	-----
						21.00

	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 UV RAD MW/CM2 EPPELEY-2	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET
0008	21.8	21.8	-----	0.0	0.0	0.	0.
.657	-----	-----	-----	-----	-----	-----	-----
-----	27.7	-----	-----	5.6	-----	543.	-----
-----	-----	28.5	-----	-----	0.0	-----	0.
-----	32.1	-----	1.73	5.3	-----	533.	-----
-----	33.3	-----	2.14	-----	0.0	-----	0.
-----	36.3	-----	2.91	5.2	-----	529.	-----
-----	37.2	-----	2.68	-----	0.0	-----	1.
-----	38.1	-----	2.73	4.8	-----	535.	-----
-----	38.5	-----	2.86	-----	0.2	-----	2.
-----	39.5	-----	2.54	3.8	-----	543.	-----
-----	39.7	-----	2.68	-----	0.5	-----	3.
-----	37.3	-----	1.82	3.0	-----	551.	-----
-----	37.2	-----	1.88	-----	0.4	-----	2.
-----	34.4	-----	1.07	2.5	-----	549.	-----
-----	33.5	-----	0.98	-----	0.4	-----	1.
-----	33.0	-----	0.80	2.0	-----	539.	-----
.452	-----	33.0	0.71	-----	0.3	-----	1.

AFF-131

DIESEL VS. N-BUTANE

1981 SEPT. 18

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE 1		SIDE 2		SIDE
		PART/CC CLIMET	#PART>.5 CLIMET	PART/CC CLIMET	#PART>.5 CLIMET	PART/CC CLIMET	#PART>1 CLIMET	PART/CC CLIMET	#PART>1 CLIMET	PART/CC CLIMET	#PART>1 CLIMET	BSCAT MRI-388	BSCAT MRI-388	AER. UM3/ TSI-0
1 605	-175	0.	0.	0.	0.	0.	0.	0.	0.	0.0	0.0	0.0	0	
1 835	-25	504.	-----	358.	-----	0.	-----	78.0	-----	-----	-----	99		
1 845	-15	-----	0.	-----	-----	0.	-----	-----	-----	0.2	-----	-----		
1 1005	65	475.	-----	291.	-----	0.	-----	58.0	-----	0.2	-----	91		
1 1015	75	-----	0.	-----	-----	0.	-----	-----	-----	0.2	-----	-----		
1 1105	125	452.	-----	232.	-----	58.0	-----	-----	-----	60	-----	-----		
1 1115	135	-----	0.	-----	-----	0.	-----	-----	-----	0.2	-----	-----		
1 1205	185	472.	-----	275.	-----	72.0	-----	-----	-----	84	-----	-----		
1 1215	195	-----	1.	-----	-----	0.	-----	-----	-----	0.1	-----	-----		
1 1305	245	490.	-----	312.	-----	82.0	-----	-----	-----	112	-----	-----		
1 1315	255	-----	1.	-----	-----	0.	-----	-----	-----	0.0	-----	-----		
1 1405	305	497.	-----	316.	-----	77.0	-----	-----	-----	103	-----	-----		
1 1415	315	-----	1.	-----	-----	0.	-----	-----	-----	0.0	-----	-----		
1 1505	365	483.	-----	295.	-----	62.0	-----	-----	-----	87	-----	-----		
1 1515	375	-----	0.	-----	-----	0.	-----	-----	-----	0.0	-----	-----		
1 1605	425	471.	-----	265.	-----	52.0	-----	-----	-----	68	-----	-----		
1 1615	435	-----	0.	-----	-----	0.	-----	-----	-----	0.1	-----	-----		

622

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 1		SIDE 1		SIDE 1		SIDE
		AER.S UM2/CC TSI-023	TSI-023	AER.S UM2/CC TSI-023	METHANE PPM BYRON	N-C4 PPM	N-C9 PPM	DMS-1	VAR 3700	N-C10 PPM	N-C10 PPM	VAR 3700	VAR 3700	N-C1
1 605	-175	12.	12.	1.95	0.0008	-----	-----	-----	-----	-----	-----	-----		
1 735	-85	-----	-----	-----	0.0016	0.0062	0.0059	0.0059	0.00	-----	-----	-----		
1 835	-25	1852.	-----	1.87	-----	-----	-----	-----	-----	-----	-----	-----		
1 845	-15	-----	17.	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1005	65	1497.	-----	1.75	-----	0.0043	0.0052	0.00	-----	-----	-----	-----		
1 1015	75	-----	32.	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1105	125	1419.	-----	1.71	-----	0.0035	0.0047	0.00	-----	-----	-----	-----		
1 1115	135	-----	12.	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1205	185	1699.	-----	1.77	-----	0.0033	0.0050	0.00	-----	-----	-----	-----		
1 1215	195	-----	35.	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1305	245	1750.	-----	1.77	-----	0.0035	0.0056	0.00	-----	-----	-----	-----		
1 1315	255	-----	21.	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1405	305	1579.	-----	2.02	-----	0.0039	0.0051	0.00	-----	-----	-----	-----		
1 1415	315	-----	21.	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1505	365	1321.	-----	1.82	0.0020	-----	A	0.0052	A	0.00	-----	-----		
1 1515	375	-----	41.	-----	-----	-----	-----	-----	-----	-----	-----	-----		
1 1605	425	1044.	-----	1.91	-----	-----	-----	-----	-----	-----	-----	-----		
1 1615	435	-----	10.	-----	-----	-----	-----	-----	-----	-----	-----	-----		

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
BSCAT	BSCAT	AER.V	AER.V	AER.N	AER.N
10-4 M-1	10-4 M-1	UM3/CC	UM3/CC	PART/CC	PART/CC
MRI-388	MRI-388	TSI-023	TSI-023	TSI-023	TSI-023
0.0	0.0	0.	0.	1940.	1940.
78.0	-----	99.	-----	4.7E 04	-----
-----	0.2	-----	1.	-----	481.
58.0	-----	91.	-----	3.6E 04	-----
-----	0.2	-----	4.	-----	519.
58.0	-----	60.	-----	3.7E 04	-----
-----	0.2	-----	0.	-----	369.
72.0	-----	84.	-----	3.2E 04	-----
-----	0.1	-----	3.	-----	-644.
82.0	-----	112.	-----	2.3E 04	-----
-----	0.0	-----	1.	-----	1423.
77.0	-----	103.	-----	3.4E 04	-----
-----	0.0	-----	1.	-----	1047.
62.0	-----	87.	-----	2.8E 04	-----
-----	0.0	-----	2.	-----	345.
52.0	-----	68.	-----	1.5E 04	-----
-----	0.1	-----	0.	-----	830.

AFF-131

DIESEL VS. N-BUTANE

1981 SEPT. 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SII	
		N-C15 PPM	VAR 3700	N-C15 PPM	VAR 3700	FAN PPM	ECD-3	PAN PPM	ECD-3	HCHO PPM	PAR1
								CA		CA	TSI-
1 605	-175	----	----	-----	0.000	0.000	-----	-----	-----	182	
1 735	-35	0.0362	-----	-----	-----	-----	-----	-----	-----	---	
1 810	-50	-----	-----	-----	-----	-----	-----	0.010	0.000	---	
1 835	-25	-----	-----	-----	0.000	-----	-----	-----	-----	2.8	
1 845	-15	-----	0.0167	-----	-----	0.000	-----	-----	-----	---	
1 1005	65	0.0498	-----	-----	0.003	-----	-----	-----	-----	2.7	
1 1015	75	-----	-----	-----	-----	0.004	-----	-----	-----	---	
1 1105	125	0.0097	-----	-----	0.008	-----	-----	-----	-----	1.8	
1 1115	135	-----	-----	-----	-----	0.008	-----	-----	-----	---	
1 1200	180	-----	-----	-----	-----	-----	-----	0.010	0.000	---	
1 1205	185	-----	-----	-----	0.022	-----	-----	-----	-----	1.0	
1 1215	195	-----	-----	-----	-----	0.013	-----	-----	-----	---	
1 1305	245	0.0443	-----	-----	0.037	-----	-----	-----	-----	1.5	
1 1315	255	-----	-----	-----	-----	0.018	-----	-----	-----	---	
1 1405	305	0.0509	-----	-----	0.047	-----	-----	-----	-----	2.6	
1 1415	315	-----	-----	-----	-----	0.023	-----	-----	-----	---	
1 1505	365	0.0424	-----	-----	0.048	-----	-----	-----	-----	2.2	
1 1515	375	-----	-----	-----	-----	0.028	-----	-----	-----	---	
1 1605	425	-----	-----	-----	0.047	-----	-----	-----	-----	968	
1 1610	430	-----	-----	-----	-----	-----	-----	0.050	0.004	---	
1 1615	435	-----	-----	-----	-----	0.029	-----	-----	-----	---	

623

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2		SIDE 1		SIDE 2		SID
		PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART		
								PART		
1 605	-175	0.	0.	96.	96.	0.	0.	0.	0.	86
1 835	-25	3286.	-----	7037.	-----	3321.	-----	-----	-----	---
1 845	-15	-----	0.	-----	0.	-----	49.	-----	49.	---
1 1005	65	3374.	-----	5471.	-----	2366.	-----	-----	-----	60
1 1015	75	-----	0.	-----	0.	-----	0.	-----	0.	---
1 1105	125	3463.	-----	8604.	-----	2964.	-----	-----	-----	36
1 1115	135	-----	44.	-----	0.	-----	49.	-----	49.	---
1 1205	185	2176.	-----	7664.	-----	3641.	-----	-----	-----	60
1 1215	195	-----	89.	-----	48.	-----	37.	-----	37.	---
1 1305	245	977.	-----	3856.	-----	3419.	-----	-----	-----	92
1 1315	255	-----	133.	-----	96.	-----	0.	-----	0.	---
1 1405	305	89.	-----	3278.	-----	3100.	-----	-----	-----	74
1 1415	315	-----	0.	-----	169.	-----	37.	-----	37.	---
1 1505	365	400.	-----	2627.	-----	2325.	-----	-----	-----	72
1 1515	375	-----	444.	-----	48.	-----	74.	-----	74.	---
1 1605	425	488.	-----	2169.	-----	2325.	-----	-----	-----	40
1 1615	435	-----	266.	-----	48.	-----	0.	-----	0.	---

----- NO DATA TAKEN

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
HCHO	HCHO	PART.024	PART.024	PART.042	PART.042
PPM	PPM	PART/CC	PART/CC	PART/CC	PART/CC
CA	CA	TSI-023	TSI-023	TSI-023	TSI-023
-----	-----	1837.	1837.	0.	0.
0.010	0.000	-----	-----	-----	-----
-----	-----	2.8E 04	-----	4176.	-----
-----	-----	-----	167.	-----	261.
-----	-----	2.7E 04	-----	-3132.	-----
-----	-----	-----	501.	-----	0.
-----	-----	1.8E 04	-----	3480.	-----
-----	-----	-----	-334.	-----	609.
0.010	0.000	-----	-----	-----	-----
-----	-----	1.0E 04	-----	7395.	-----
-----	-----	-----	-668.	-----	-174.
-----	-----	1.5E 04	-----	-1305.	-----
-----	-----	-----	835.	-----	348.
-----	-----	2.6E 04	-----	0.	-----
-----	-----	-----	835.	-----	0.
-----	-----	2.2E 04	-----	174.	-----
-----	-----	-----	-167.	-----	-87.
-----	-----	9686.	-----	-435.	-----
0.050	0.004	-----	-----	-----	-----
-----	-----	-----	167.	-----	348.

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
0.	0.	7.	7.	0.	0.
3321.	-----	867.	-----	147.	-----
-----	49.	-----	0.	-----	4.
2386.	-----	600.	-----	197.	-----
-----	0.	-----	0.	-----	18.
2964.	-----	360.	-----	60.	-----
-----	49.	-----	0.	-----	0.
3641.	-----	600.	-----	112.	-----
-----	37.	-----	13.	-----	11.
3419.	-----	927.	-----	214.	-----
-----	0.	-----	7.	-----	4.
3100.	-----	747.	-----	218.	-----
-----	37.	-----	7.	-----	0.
2325.	-----	720.	-----	179.	-----
-----	74.	-----	33.	-----	0.
2325.	-----	400.	-----	151.	-----
-----	0.	-----	0.	-----	0.

2

AFF-131

DIESEL VS. N-BUTANE
1981 SEPT. 18

NOTES

- A PRESSURE ROSE - RETENTION TIMES OFF (AREA MAY BE AFFECTED).
- B OFF FOR UNKNOWN REASON.

624

AFF-132
NOX AIR IRRADIATION
1981 SEPT. 21

0802: START FILL. WET: 6.0 DRY: 0.0 WET BULB: 18.0
DRY BULB: 32.0 R.H.= 24% DEW POINT: 8.2 C
0912: END FILL.
0924: INJECTED 5.0 ML. NO₂.
0926: INJECTED 18.0 ML. NO.
0928: INJECTED 0.38 ML. PROPENE AND 0.38 ML. PROPANE.
0931: MIX BAG.
0936: DIVIDE BAG.
1100: UNCOVER BAG (T=0).
1105: WEATHER: CLEAR AND HOT.
1315: RUN OVER.

RESULTS	SIDE 1	SIDE 2
CALC.AVG.OH(PPT)	0.040	0.031
CALC.RAD.INPUT(PPB/MIN)	0.092	0.066
-D(NO)/DT	0.59	0.33

CALC. AVG. CH = 30.8 * D LN(PROPANE/PROPENE)/DT
CALC. RAD. INPUT = 16.0 * (AVG.OH) * (60+MIN.AVG.NO₂)

T=0 AT 1100 PST

BAG NO. 24 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	35.2	2.4	DEG C	SIDE 1
T	DORIC-1	36.1	2.0	DEG C	SIDE 2
UV RAD	EPFLEY-2	3.23	0.19	MW/CM ²	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.358	PPM	SIDE 1
NO	B-NOX-1	0.354	PPM	SIDE 2
NO ₂ -UNC	B-NOX-1	0.112	PPM	SIDE 1
NO ₂ -UNC	B-NOX-1	0.109	PPM	SIDE 2
THC	BK6800-1	4.81	PPMC	SIDE 1
THC	BK6800-1	5.04	PPMC	SIDE 2
PROPANE	DMS-1	0.0125	PPM	SIDE 1
PROPANE	DMS-1	0.0124	PPM	SIDE 2
PROPENE	DMS-1	0.0091	PPM	SIDE 1
PROPENE	DMS-1	0.0091	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPFLEY-2	EPFLEY 14290 UV RADIOMETER; UNDER BAG
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4000	ECD-3	AF-LAB; 12° 5% CARBOWAX-600 GC; ECD

AFF-132
NOX AIR IRRADIATION
1981 SEPT. 21

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
		OZONE PPM	OZONE PPM	NO PPM	NO PPM	NO ₂ -UNC PPM	NO ₂ -UNC PPM	NOX- PPM
1 945	-75	-----	-----	-----	-----	-----	-----	-----
1 1005	-55	-----	-----	-----	-----	-----	-----	-----
1 1020	-40	-----	-----	-----	-----	-----	-----	-----
1 1035	-25	0.002	-----	0.358	-----	0.112	-----	0.4
1 1045	-15	-----	0.002	-----	0.354	-----	0.109	-----
1 1100	0	0.003	-----	0.356	-----	0.114	-----	0.4
1 1115	15	-----	0.003	-----	0.353	-----	0.113	-----
1 1130	30	0.003	-----	0.348	-----	0.124	-----	0.4
1 1145	45	-----	0.004	-----	0.348	-----	0.121	-----
1 1200	60	0.003	-----	0.332	-----	0.132	-----	0.4
1 1215	75	-----	0.004	-----	0.338	-----	0.130	-----
1 1230	90	0.004	-----	0.311	-----	0.142	-----	0.4
1 1245	105	-----	0.004	-----	0.322	-----	0.132	-----
1 1300	120	0.006	-----	0.286	-----	0.158	-----	0.4
1 1315	135	-----	0.005	-----	0.311	-----	0.139	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 LNC3/C3=	SIDE 2 LNC3/C3=
-----	-----	-----	-----	0.5180	-----
-----	-----	-----	-----	-----	0.5170
-----	-----	-----	-----	-----	0.5130
0.112	-----	0.479	-----	0.5020	-----
-----	0.109	-----	0.471	-----	-----
0.114	-----	0.486	-----	0.4860	-----
-----	0.113	-----	0.473	-----	0.5220
0.124	-----	0.480	-----	0.5030	-----
-----	0.121	-----	0.477	-----	0.5550
0.132	-----	0.472	-----	0.5650	-----
-----	0.130	-----	0.471	-----	0.5800
0.142	-----	0.470	-----	0.5750	-----
-----	0.132	-----	0.468	-----	0.6110
0.158	-----	0.451	-----	0.6460	-----
-----	0.139	-----	0.458	-----	0.6480

2

AFF-132
NOX AIR IRRADIATION
1981 SEPT. 21

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM ² EPPLEY-2	SIDE 1 NMHC PPMC BYRON	SIDE NMI PPM BYR
1 1035	-25	4.81	-----	32.1	-----	-----	0.08	---
1 1045	-15	-----	5.04	-----	34.1	-----	-----	0.0
1 1100	0	-----	-----	33.1	-----	3.19	0.07	---
1 1115	15	-----	-----	-----	33.9	3.09	-----	0.0
1 1130	30	-----	-----	34.1	-----	3.46	0.09	---
1 1145	45	-----	-----	-----	35.2	3.19	-----	0.0
1 1200	60	-----	-----	36.4	-----	3.46	0.09	---
1 1215	75	-----	-----	-----	36.8	3.41	-----	0.0
1 1230	90	-----	-----	37.3	-----	3.37	0.09	---
1 1245	105	-----	-----	-----	37.9	3.23	-----	0.0
1 1300	120	-----	-----	38.1	-----	3.00	0.09	---
1 1315	135	-----	-----	-----	38.5	2.91	-----	0.0

----- NO DATA TAKEN

12 NOV 1981
PAGE 3

E 2	UV RAD	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
G C	MW/CM2	NMHC	NMHC	THC	THC	PAN	PAN
C-1	EPPLEY-2	PPMC	PPMC	PPMC	PPMC	PPM	PPM
	BYRON	BYRON	BYRON	BYRON	BYRON	ECD-3	ECD-3
-----	-----	0.08	-----	2.05	-----	0.000	-----
1	-----	-----	0.07	-----	2.00	-----	0.000
3.9	3.19	0.07	-----	2.00	-----	-----	-----
3.9	3.09	-----	0.08	-----	2.08	-----	-----
3.2	3.46	0.09	-----	2.00	-----	-----	-----
3.2	3.19	-----	0.08	-----	2.10	-----	-----
3.8	3.46	0.09	-----	2.00	-----	-----	-----
3.8	3.41	-----	0.09	-----	2.08	-----	-----
7.9	3.37	0.09	-----	2.10	-----	-----	-----
7.9	3.23	-----	0.09	-----	2.00	-----	-----
3.5	3.00	0.09	-----	2.09	-----	0.000	-----
3.5	2.91	-----	0.09	-----	2.11	-----	0.000

AFF-132
NOX AIR IRRADIATION
1981 SEPT. 21

CLOCK BY HR.	ELAPSED TIME (MIN)	SIDE 1		SIDE 2	
		TIME	HCHO PPM CA	HCHO PPM CA	
1 1020	-40	0.013	0.000		
1 1305	125	0.000	0.000		

----- NO DATA TAKEN

628

(THE REVERSE OF THIS PAGE IS BLANK.)